TENNECO AUTOMOTIVE ANNUAL REPORT 2002



TENNECO **Automotive**

1-19387 ARIS PE 1203 12-31-02 Tenneco Automotive XXXXXX

UR MISSION

FROCESSED APR 08 2003

Countries: 23

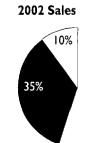
ArvinMeritor Faurecia Visteon Delphi Eberspacher	Leading technologies Experienced team Product/process quality Global program management Asian alliances Joint ventures in China, Thailand,	General Motors Ford Volkswagen DaimlerChrysler PSA Peugeot	GM Suburban/Yukon XL/ Escalade/Tahoe GM Envoy/Trailblazer VW Bora/Golf/Leon/A3 GM Blazer/Bravada/Jimmy Dodge Ram Pickup	Emission regulations Noise reduction regulations Demand for diesel/hybrid vehicles Emerging markets Customer penetration New technologies Non-automotive markets
ArvinMeritor Delphi Tokico ZF Sachs Bilstein Kayaba	and U.K. Customer relationships Broad product range Full service supplier Just In Time (JIT) delivery	Ford Volkswagen DaimlerChrysler General Motors Nissan Motor Co.	GM Suburban/Yukon XL/ Escalade/Tahoe VW Golf/ Audi TT/ Toledo DaimlerChrysler Town & Country/Voyager/Caravan Ford F-Series Truck DaimlerChrysler Stratus/Sebring	New technologies
ArvinMeritor OE Service Bosal Faurecia Goerlich	Brand dominance Relationships with all major wholesale distributors/retailers Global presence Leading market share	NAPA TEMOT Autoteile Automotive Distribution International Advance Auto Parts Uni-Select	Mega-Flow [™] mufflers Quiet-Flow [™] mufflers Tru-Fit [™] Universal mufflers SoundFX [™] mufflers Clean Air [™] catalytic converters	Growing number of vehicles on road Aging vehicle population OE Service New technologies Emission regulations Performance product demand
ArvinMeritor OE Service ZF Sachs Kayaba	Product innovation Product quality Complete product & vehicle coverage Targeted marketing programs	NAPA Advance Auto Parts O'Reilly Automotive TEMOT Autoteile Sears	Reflex [™] shocks & struts Sensa•Trac [®] shocks & struts RS9000X [™] shocks GasMagnum [®] shocks Strut-Mate [®]	Growing number of vehicles on road Aging vehicle population OE Service New technologies Unperformed maintenance Premium mix expansion Broader product coverage Heavy-duty truck penetration Safety/installer education
				Source: DRI Automotive Group
	Light Truck Passeng	ger Cars	North America	Western Furance

Light Truck Passenger Cars North America Western Europe GM Silverado VW Golf Ford F-Series Truck Opel Astra 55% 45% 90% Ford Explorer Opel Corsa Dodge Ram Pickup Peugeot 307 Ford F-Series Super Duty Renault Clio DaimlerChrysler Caravan VW Passat GM Trailblazer GM Sierra Pickup Passenger Car Passenger Car Ford Ranger ■ Light Truck Light Truck

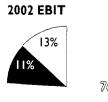
TENNECO AUTOMOTIVE INC.

People: Approxima	ately 19,600	Manufacturing & [Distribution Facilities: 90	Engineering Centers: 8
Original Equipment – Emission Control	\$1.9 billion	Passenger cars Light trucks Commercial trucks Industrial applications Motorbikes	Complete exhaust systems Fabricated manifolds Manifold-converter modules Downpipes Exhaust heat exchangers Mufflers Diesel particulate filter systems Catalytic converter shells	((Ĝ)) Gillet Wimetai. (Ĉ))
Original Equipment – Ride Control	\$671 million	Passenger cars Light trucks Commercial trucks Niche markets	Shocks & struts Suspension bushings Coil, air & leaf springs Torque rods Engine/body mounts Suspension modules/systems Control arms/bars/links	TOUROLD" CLEVITE Elestomers (FFIC-Rot.
Aftermarket – Emission Control	\$358 million	Passenger cars Light trucks Commercial trucks Performance vehicles	Manifolds Mufflers Pipes Tubing Mounting components Catalytic converters	WAVINER FOR
Aftermarket – Ride Control	\$550 million	Passenger cars Light trucks Commercial trucks Trailers	Shocks Struts Cartridges Mounting kits	TARMSTRONG DAGE

CAT SHEET BEING AND	2002	2001
Revenues (millions)	3,459	3,364
Ride Control/Emission Control Balancet	35/65	35/65
Original Equipment/Aftermarket Balancet	74/26	72/28
†percentage of sales		



55%



76%

North America ■ Europe \square Rest of World

North America ■ Europe Rest of World

CORPORANTE PROFILE Jenneso-Automotive is one of the world's largest designers, manufacturers and marketers of emission control and ride control products and systems for the automotive original equipment market and aftermarket. The company became an independent corporation in 1999, allowing singular focus on strategies to maximize global results. Tenneso Automotive markets its products principally under the Monroe', Walker', Ciliet', and Clevite' Elastomers brand names. Leading manufacturers worldwide use our products in their vehicles, attracted principally by our groundbreaking advanced technologies. We are one of the top suppliers to the automotive aftermarket, offering exceptionally strong brand recognition among consumers and trade personnel. Tenneso Automotive employs approximately—19,000 people worldwide.

MISSION: Tenneco Automotive's mission is to delight our customers as the number one technology-driven, global manufacturer and marketer of value-differentiated ride-control, emission control and elastomer products and systems. We will strengthen our leading position through a shared-value culture of employee involvement, where an intense focus on continued improvement delivers shareholder value in everything we do.

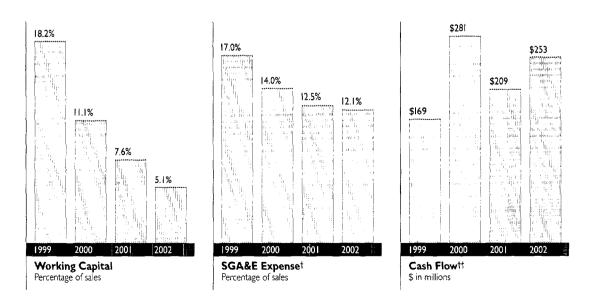
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6.	Coing Stronger	Capitalizing on new opportunities
8.	Going Smarter	Standardizing products and processes for flexibility
9.	Going Leaner	Reducing costs, inventories and customer lead times
[0.	Going Cleaner	Addressing stricter emission standards through innovation
12.	Going Safer	Promoting the safety benefits of ride control products
]4.	Going Further	Leveraging capabilities and customer responsiveness
15.	Going Together	Committing to continuous improvement
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FINANCIAL HIGHLIGHTS

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(dollars in millions except per share data)	2002	2001	2000
Sales	\$ 3,459	\$ 3,364	\$ 3,528
Income before interest, taxes and minority interest	\$ 169	\$ 92	\$ 120
Depreciation and amortization	\$ 144	\$ 153	\$ 151
EBITDA*	\$ 313	\$ 245	\$ 271
Income before extraordinary item and cumulative effect of change in accounting principle	\$ 31	\$ (130)	\$ (41)
Earnings per share, before extraordinary item and cumulative effect of change in accounting principle	\$ 0.74	\$ (3.43)	\$ (1.18)
Capital expenditures	\$ 138	\$ 127	\$ 146
Average diluted shares outstanding	41,667,815	38,001,248	34,906,825
Total debt	\$ 1,445	\$ 1,515	\$ 1,527
	;		

^{*}EBITDA represents income before extraordinary item and cumulative effect of change in accounting principle, interest expense, income taxes, minority interest and depreciation and amortization (the addition of lines two and three in table above). EBITDA is not a calculation based upon generally accepted accounting principles. The amounts included in the EBITDA calculation, however, are derived from amounts included in the historical statements of income data. In addition, EBITDA should not be considered as an alternative to net income or operating income as an indicator of our operating performance, or as an alternative to operating cash flows as a measure of liquidity. We have reported EBITDA because we regularly review EBITDA as a measure of our ability to incur and service debt. In addition, we believe our debtholders utilize and analyze our EBITDA for similar purposes. We also believe EBITDA assists investors in comparing a company's performance on a consistent basis without regard to depreciation and amortization, which can vary significantly depending upon many factors. However, the EBITDA measure presented in this document may not always be comparable to similarly titled measures reported by other companies due to differences in the components of the calculation.



†Selling, general and administrative expense plus engineering, research and development expense.

^{††}Cash flow before financing activities, interest and tax payments.

TO OUR SHAREHOLDERS: Tenneco Automotive recorded its most successful year as a stand-alone company in 2002.

We did so by maintaining our strategic focus on reducing debt and improving cash flow through four primary means: keeping selling, general, administrative and engineering (SGA&E) costs in check; improving our working capital position; maintaining gross margin levels; and strengthening business relationships. In addition, our team capitalized on the opportunities presented by a surprisingly robust North American vehicle production rate. At the same time, we dealt effectively with challenging economic and market conditions in Europe and other regions by rapidly cutting spending and optimizing assets.

By adhering to our 2002 strategic focus, we:

- Strengthened business relations, winning important new original equipment (OE) business, expected to launch over the next three years;
- Maintained SGA&E expenses at our objective of
 12 percent of revenues despite higher investments in sales promotion and engineering;
- ▷ Improved cash flow from working capital by \$67 million, exceeding our goal by 34 percent;

- ▶ Favorably amended our debt covenants with a beneficial three-year package; and,
- Paid down \$70 million in total borrowings, thereby helping to lower interest expense last year by \$29 million, and reducing our overall borrowings since 1999 by \$270 million.

As a result, our company reported its first year of operating profitability since becoming an independent entity in late 1999. We also delivered a 98 percent total return to shareholders in 2002, substantially outperforming both the industry average and the S&P 500. Unfortunately, like the stocks of most auto suppliers, at the time this report went to press, our stock was trading below year-end 2002 levels, which we believe is due to skepticism about 2003 vehicle production levels and economic uncertainty.

We are pleased with the overall progress we've made and are determined to stay firm on the strategic direction that has brought the success achieved so far. However, we are aware that further improvements are needed and the future holds challenges as well as opportunities.

Working within the context of our four-pronged strategy, we are taking steps to sharpen our competitive edge by further enhancing manufacturing quality, increasing efficiency and streamlining processes.

At the same time, we are striving to expand our revenue base by developing advanced products and leveraging business relationships.

EFFICIENCIES DRIVE COST SAVINGS We are targeting substantial cost savings in 2003 to more than offset potential increases in material and labor costs, contractual price concessions and possible volume declines in replacement and original equipment markets worldwide.



Mark P. Frissora Chairman and Chief Executive Officer

Our primary initiative for improving our global manufacturing and distribution efficiency is Project Genesis. Since launching the first phase of Genesis in December 2001, we have reduced excess capacity and costs by closing eight facilities and streamlining the workflow at 21 plants worldwide. These moves generated approximately \$12 million in savings last year at about two-thirds the anticipated cost. We plan to complete the Phase I activities in 2003 and recognize an additional \$15 million in savings this year. Starting in 2004, we expect \$30 million in annualized savings as a result of Project Genesis.

Six Sigma and Lean manufacturing also provide long-term cost savings. Six Sigma, a quality methodology designed to eliminate process variability, product defects and waste that undermine customer loyalty, generated \$25 million in cost savings last year and we expect similar results in 2003. Our Lean manufacturing initiatives, modeled on the well-regarded Toyota Production System, are effectively reducing costs, inventories and customer lead times while improving on-time delivery.

Cost management is another key element of our strategy. Since 1999, we have reduced our total workforce by 17 percent and slashed overhead spending by \$136 million. SGA&E as a percent of sales has improved to 12 percent from about 17 percent over the three-year period. Our 2003 goal is to reduce our SGA&E costs to 11.5 percent of sales, primarily by cutting overhead expenses by about \$24 million.

We have also organized a global, centralized supply chain management team that is working to offset expected price increases and reduce our overall material costs by leveraging our worldwide purchases, increasing sourcing in low-cost areas and using alternative materials when appropriate.

Finally, we've improved our working capital balances by \$416 million since 1999 — primarily by better managing receivables, inventories and payables. Based on industry benchmarking studies, we believe there is still a \$150 million opportunity for improvement. In 2003, we expect to reduce working capital by \$50 million, generating additional cash flow for debt reduction.

NEW PRODUCTS AND MARKETS CREATE GROWTH
Our growth strategy emphasizes increasing revenues and
capturing greater efficiencies. We continue to commercialize
innovative technologies for OE customers. These advanced
products achieve improved emission control performance
that meets more stringent environmental regulations and
provide safer vehicle handling to address growing safety
issues, while adding content per vehicle.

For example, we were awarded one production and three development OE contracts in Europe for our Continuously Controlled Electronic Suspension (CES) system in 2002. We also won contracts for advanced emission control systems for two major European-based luxury brands that are launching in 2004, and are expected to generate some \$200 million in total revenues over four years.

Moreover, we continue to transfer product technologies from our OE business to the aftermarket. This practice extends the marketing reach of each product, spreads the development costs and enhances the return on our investment. Offering products with premium benefits helps further distinguish us and our customers from competitors.

In 2002, we launched our premium Reflex[™] shock absorber — originally developed for OE applications — in the European aftermarket, having previously introduced this advanced ride control product in North America. As a result, our European business increased its sales mix of premium products by three percentage points for the year. We hope to see similar success when we roll out Reflex[™] in Australia in 2003.

Besides increasing sales through new products, penetration of additional markets provides enormous opportunities. China, for example, represents the world's fastest-growing automotive market. We are already capitalizing on this exciting trend with our majority-ownership joint ventures in Shanghai and Dalian for emission control and Beijing for ride control. Overall, revenues from China in 2002 increased 83 percent over 2001. Going forward, our strategy is to continue to identify and establish partnerships in China and other key growth markets.

Joint ventures and strategic alliances have also enabled us to capture an increasing share of the Japanese OE business. Sales to Toyota, Honda and Nissan in North America are 26 percent higher today than in 1999.

Another market offering strong growth potential is heavyduty trucks. Our current sales to large truck manufacturers make up only about 6 percent of our total OE sales. However, we recently won several important development contracts based on our leading-edge exhaust products, such as diesel particulate filters and DeNox converters. Our high-margin North American elastomer business — which was awarded \$60 million in new business in 2002 — draws a large portion of its sales from this market as well.

PREPARED FOR UNCERTAINTY At present, the economic outlook for 2003 is tenuous. Political tensions are contributing to consumer caution and a restrained outlook for business conditions throughout the world. In North America, generous incentive programs buoyed light vehicle sales in 2002, which may have negative consequences this year if the programs either expire or simply lose impact with consumers.

We believe we are well prepared to deal with these uncertainties. Our lean manufacturing philosophy, featuring increased speed and quality, improved workflow and processes, and a relentless cost management focus, will help us respond rapidly to changing sales trends.

Events of the past year necessitate addressing the issue of corporate integrity. I can assure shareholders that Tenneco Automotive not only zealously adopts Securities and Exchange Commission mandates and corporate governance best practices, but we have made many of them our standard operating practice for years.

We have properly attributed our improvement in 2002 to proven strategies for working capital management and repayment of borrowings. Even the most potent tactics, however, cannot deliver results without the dedication, enthusiasm and skill of the people charged with their execution.

During 2002, we recognized the optimistic, "can do" spirit of the Tenneco Automotive workforce in our new motto, Our Mission is GO!

We believe the capabilities of the people of Tenneco Automotive — coupled with our strategies and a renewed emphasis on execution and discipline — will continue to propel our company forward to new levels of success.

Mark P. Frissora
Chairman and Chief Executive Officer
April 2003

We were a company on the go in 2002 — a year in which our strategies showed solid results. Our primary goals were to generate cash and pay down borrowings and to win new business and build revenues through stronger customer relationships.

The progress we achieved — repaying \$70 million in borrowings and winning more than \$1.2 billion in OE and aftermarket business — shows a results oriented company in action. We moved aggressively forward, driven to continually improve our performance. We were a company whose Mission is GO. That phrase sums up our view about the future, too. We provide the technology, products and systems that make vehicles safer and run cleaner. We have a targeted growth strategy for profitable, value-added opportunities in promising market sectors and



regions. We have a global manufacturing and distribution system that is growing more efficient while better serving our customers. We are coordinating our worldwide engineering expertise to help customers find solutions and meet tomorrow's regulatory requirements today. We are joining with strategic partners to enter new markets economically and add complementary abilities and skills to achieve growth. We left the starting blocks as a stand-alone company in 1999 carrying \$1.715 billion in bank loans and bond debt. As we continue to shed the weight of debt, we are picking up speed, and can act even faster, more flexibly and more effectively to seize opportunities and achieve profitable growth by executing our strategy with discipline and focus.



vith our alliance partner Futaba to supply unique predicts such as this ouble wrap differ for the exhaust system on Toyota's Sienna migran. Financial strength begins at the top-line. Our revenues grew in 2002 as we benefited from our strategic investments in strong growth areas, including China, which was the fastest growing passenger car market in 2002. Having been in China since 1995, our joint venture operations are supplying leading original equipment manufacturers, including Volkswagen, the market leader. ** We also bounded into newer markets. We attracted new customers in the European heavy-duty market with our advanced emission control products including exhaust filters designed specifically for diesel engines. Geographically, we continue to look east in Europe to take advantage of faster growing economics and lower production costs. We have already established operations in Poland and the Gzech Republic and are now reaching out to customers in Russia where we expect to begin a staged entry with the start up of our first production facility. expected in late 2003. ** Overall, in 2002, we captured a significant number of equipment contracts with 20 different customers for platforms expected.



into production in 2005 through 2005, including an increase and ore profitable.

hot-end exhaust business in Europe and high-mai sin-elastomer business in North America.

Through global alliances and joint ventures, we continued increasing our global presence without making substantial new capital investments. Approximately eight percent of our new original equipment business in 2002 was generated through our Asian-based alliances.

We have a very strong presence with our global equipment control products on many top-selling cars and light trucks in both North America and Europe including the popular GM silverado, the Ford F-Series truck and the VW=Golf.

We added new aftermarket customers in 2002 totaling an estimated \$45 million in annualized revenue. Our North American aftermarket business signed up several important new customers, including Discount Automotive and Parts Authority. In Europe, the introduction of the Reflex shock absorber boosted our premium mix — as well as aftermarket financial results — as we sold our one-millionth unit within only four months.

J

The Sterling
Heights justin-time facility
assembles and
delivers more
than 1.2 million
suspension
modules for
DaimlerChysler's
Stratus/Sebring
modules.

TEVA: is a registered trademark of Stern Stewart & Co.

Our key process initiatives — Six Sigma, Lean manufacturing, BOS and EVA®† (Economic Value Added) — help us work smarter. We continued to make strides during 2002 to make our organization as efficient and flexible as possible. We are driving quality up and costs down through application of Six Sigma techniques, which produced more than \$25 million in savings in 2002. We also continue to integrate our manufacturing, distribution and engineering operations by taking additional steps to standardize products and processes and share information and expertise across global teams. Emission control technologies are rapidly being transferred between our European and North American operations. Our North American and South American ride control teams are helping to extend the company's elastomers presence to Europe. We are using EVA® as a key decision-making tool, which helps us work smarter in how we generate cash and target the best return on capital. We also formed a new Global Supply Chain Management organization that is working to reduce the amount we spend on materials.



With advanced robotics and Lean manufacturing, our JIT facility in Saarlouis, Germany delivers a series of exhaust systems directly to the Ford Focus production line, every ten minutes, 24-hours a day, five days a week.

We are becoming a leaner and more efficient organization. We successfully launched a global restructuring program in 2002 to align our production capacity to market needs and streamline our distribution networks. We closed eight facilities and improved productivity at 21 other plants. Called Project Genesis, the full annualized benefits of these efforts are expected to first appear in 2004. Last year, this program delivered nearly: \$12 million in cost savings at two-thirds the estimated cost. We anticipate additional savings of \$15 million in 2003. We continue to deploy Lean-manufacturing techniques across our facilities with weighty results. Our Smithville, Tenne expansion by 44 percent, increased available plant floor space by 20 percent and trimmed lead times by 20 percent under its Lean initiatives. We have responded to our customers around the globe with just-in-time (JIT) manufacturing facilities, which deliver products most efficiently, matching shipments exactly to the immediate production needs of our customers.



heater use to the control of the co More advanced emissions control technologies drave new business in 2002 with European heavy-duty truck and luxury passenger car manufacturers. We're helping our customers stay ahead of the U.S. and European environmental regulations, which impose increasingly stricter limits on vehicle emissions. New catalytic converter technologies, such as the Tubular Integrated Converter and Ultra Thin Wall Substrates provide new and more advanced emissions control options. We also have technologies that respond to the tremendous increase in diesel use in Europe and growing interest in North America. We have deven and commercialized a diesel particulate filter for diesel passenger vehicles that virtue minates strion particulates without impairing engine performance. Major Vehicle manufacturers, such as Peugeot, are using our diesel



particulate filter in their new passenger car and van exhaust systems. Additionally, we have developed exhaust aftertreatment systems that eliminate particulates almost entirely and reduce nitrogen oxide by 80 percent. These advanced products are designed for medium and heavy-duty vehicles that will be affected by upcoming Euro4 and Euro5 regulations. The United States is beginning to impose more stringent environmental regulations on heavy-duty trucks, similar to those currently in force in Europe. We are well positioned to transfer proven European technologies to meet the changing emission needs of the heavy-duty market in the U.S.



Shock absorbers play a critical role in stopping, steering and vehicle stability. Our Safety Triangles campaign emphasizes the importance of well-maintained shocks and struts for safer driving.

We're on the move to improve the salesy of vehicles already on the road. Our global Safety Triangle" campaign educates customers on the vital role shock absorbers and struts play in keeping vehicles safe in the three critical areas of steering, stopping and stability. During 2002, we visited 20 cities across the United States to hold driving demonstrations for more than 3,000 installers to highlight the difference between new and worn suspension parts and improve the ability of people who maintain vehicles for retail customers to spot shock absorbers and struts in need of replacement. We're expanding our marketing efforts in 2003 to educate both installers and consumers in North America and Europe on the importance of well-maintained shock absorbers for safer driving. Increasing replacement rates is important to our bottom-line. The ride control aftermarket is one of our most profitable business segments. In addition to our aggressive marketing strategy, we are continuing to improve our premium mix of



products and leverage our strong brands. Our performance shock — Rancho® — continues to be the leading brand with off-road enthusiasts in the United States, and is now making inroads in Asia and South America.

On the OE side of our ride control business, our most recent development has been driven by the increasing demand for electronic systems in Europe. Our Continuously Controlled Electronic Suspension (CES) system avoids forcing a choice between handling and comfort. CES creates the road-hugging characteristics of a sports car with the smooth ride of a luxury sedan by continuously monitoring road conditions and vehicle movement and making instantaneous adjustments in vehicle suspension. And, improved vehicle stability contributes to safer vehicles. Volvo has chosen the CES system for its S60R and V70R passenger cars and we were awarded three development contracts with other major vehicle manufacturers for this new technology.



Days of road tests and engineering analysis are cut to hours with the key life rig, which simulated road conditions and measures effects of engine operation and chassis the frient on exhaust systems, at our Edenkoben, Germany engineering center.

A company breaks out of the competitive pack by going the extra mile — providing innovation and higher levels of service as well as extending into new markets. In the aftermarket, we set the standard for marketing and customer support, which distances us from the competition and allows us to lead the market with premium brands — Monroe® and Walker® — and premium products, generating higher profit for usas well as our customers. We are pursuing modular assemblies with original equipment customers who desire suppliers to take on a greater portion of the work of combining components into a single unit. Assembling modules and full systems simplifies production for customers and adds to our revenues. We go further by working with customers on engineering solutions to design problems. In North America, a patented design and a unique manufacturing process helped us develop our LiteringRod® torque rod for heavy-duty truck customers looking for a lighter weight product without compromising strength and durability.



We are moving in the right direction with a renewed focus on long-term profitable growth. Besides strong progress in reducing borrowings, since 1999 we have revitalized our North American aftermarket business, continued to grow our original equipment book of business, improved production and distribution efficiency and set up mutually beneficial global alliances and joint ventures. With this solid footing established, we're eagerly facing the future — a feeling we captured in the phrase, Our Mission is GO.

Our Mission is GO is a rallying cry that focuses the company on going forward, continually improving our operations and performance.

We delivered measurable progress in 2002.

The challenge is to keep moving ahead with proven strategies that have brought us to this point. We are determined to flawlessly execute our plans and bring discipline to all we do in order to deliver on our commitments to our customers and to our shareholders.



BOARD OF DIRECTORS

Pictured left to right:

David B. Price, Jr. 2,3

Consultant, Former President, BF Goodrich Performance Materials

Frank E. Macher 2

Chairman and Chief Executive Officer, Federal-Mogul Corporation

Sir David Plastow²

Retired Chairman and Chief Executive Officer, Vickers plc Roger B. Porter^{2,3}

IBM Professor of Business and Government, Harvard University

Mark P. Frissora

Chairman and Chief Executive Officer, Tenneco Automotive Inc.

M. Kathryn Eickhoff 1,3 President and Chief Executive

Officer, Eickhoff Economics, Inc.

Dennis G. Severance

Accenture Professor of Computer and Information Systems, University of Michigan Business School

Paul T. Stecko 1,3

Chairman and Chief Executive Officer, Packaging Corporation of America not pictured

Charles W. Cramb

Senior Vice President and
Chief Financial Officer

The Gillette Company

Joined the Board of Directors March 11, 2003

I Audit Committee

2 Compensation/Nominating/

Governance Committee
3 Three-Year Independent Director
Evaluation Committee
Red numbers indicate the committee chain

EXECUTIVE OFFICERS OF TENNECO AUTOMOTIVE

Mark P. Frissora

Chairman and
Chief Executive Officer

Timothy R. Donovan

Executive Vice President, General Counsel and Managing Director, International

Hari N. Nair

Executive Vice President and Managing Director, Europe

Mark A. McCollum

Senior Vice President and Chief Financial Officer

Richard P. Schneider

Senior Vice President, Global Administration

Timothy E. JacksonSenior Vice President, Global Technology

Paul Schultz

Senior Vice President, Global Supply Chain Management

David G. Gabriel

Senior Vice President and General Manager, North America Aftermarket

Brent J. Bauer

Senior Vice President and General Manager, North America Original Equipment, Emission Control

Theo Bonneu

Vice President and Controller, Europe

Lois Boyd

Vice President, Global Program Management

William M. Churchill

Vice President, Global Engineering, Ride Control

Alex Drysdale

Vice President and Managing Director, Australia/New Zealand

Josep M. Fornos

Vice President and General Manager, Europe Original Equipment, Ride Control

H.William Haser

Vice President and Chief Information Officer

Ulrich Mehlmann

Vice President and General Manager, Europe Original Equipment, Emission Control

Don R. Miller

Vice President and General Manager, Europe Aftermarket

Paul D. Novas

Vice President and Treasurer

James K. Spangler

Vice President, Global Communications

Kenneth R. Trammell

Vice President and Controller

Herman Weltens

Vice President, Global Engineering, Emission Control

Neal A. Yanos

Vice President and General Manager, North America Original Equipment, Ride Control

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2002

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number 1-12387

TENNECO AUTOMOTIVE INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

76-0515284 (I.R.S. Employer Identification No.)

60045

(Zip Code)

500 North Field Drive

Lake Forest, IL

(Address of principal executive offices)

Registrant's telephone number, including area code: (847) 482-5000

Securities registered pursuant to Section 12(b) of the Act:

Name of each Exchange on which registered

New York Stock Exchange

Title of each class

6.70% Notes due 2005; 7.45% Debentures due 2025; 9.20% Debentures due 2012; 10.20% Debentures due 2008

Common Stock, par value \$.01 per share

Preferred Share Purchase Rights

New York, Chicago, Pacific and London Stock Exchanges

New York, Chicago, Pacific and London Stock Exchanges

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2). Yes \checkmark No

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter.

Class of Common Equity and Number of Shares held by Non-affiliates at June 28, 2002

Market Value held by Non-affiliates*

Common Stock, 39,721,639 shares

\$262,162,817

INDICATE THE NUMBER OF SHARES OUTSTANDING OF EACH OF THE REGISTRANT'S CLASSES OF COMMON STOCK, AS OF THE LATEST PRACTICABLE DATE. Common Stock, par value \$.01 per share, 40,217,929 shares outstanding as of March 11, 2003.

Documents Incorporated by Reference:

Document

Part of the Form 10-K into which incorporated

Portions of Tenneco Automotive Inc.'s Definitive Proxy Statement for the Annual Meeting of Stockholders to be held May 13, 2003

Part III

^{*} Based upon the closing sale price on the New York Stock Exchange Composite Tape for the Common Stock on June 28, 2002.

CAUTIONARY STATEMENT FOR PURPOSES OF THE "SAFE HARBOR" PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

This Annual Report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 concerning, among other things, the prospects and developments of the Company (as defined) and business strategies for our operations, all of which are subject to risks and uncertainties. These forward-looking statements are included in various sections of this report, including the section entitled "Outlook" appearing in Item 7 of this report. These statements are identified as "forward-looking statements" or by their use of terms (and variations thereof) such as "will," "may," "can," "anticipate," "intend," "continue," "estimate," "expect," "plan," "should," "outlook," "believe," and "seek" and similar terms (and variations thereof) and phrases.

When a forward-looking statement includes a statement of the assumptions or bases underlying the forward-looking statement, we caution that, while we believe such assumptions or bases to be reasonable and make them in good faith, assumed facts or bases almost always vary from actual results, and the differences between assumed facts or bases and actual results can be material, depending upon the circumstances. Where, in any forward-looking statement, we or our management expresses an expectation or belief as to future results, we express that expectation or belief in good faith and believe it has a reasonable basis, but we can give no assurance that the statement of expectation or belief will result or be achieved or accomplished.

Our actual results may differ significantly from the results discussed in the forward-looking statements. Factors that might cause such a difference include the following:

Changes in consumer demand and prices could adversely impact our results. Demand for and pricing of our products are subject to economic conditions and other factors present in the various domestic and international markets where the products are sold. Demand for our original equipment ("OE") products is subject to the level of consumer demand for new vehicles that are equipped with our parts. The level of new car purchases is cyclical, affected by such factors as interest rates, consumer confidence, patterns of consumer spending and the automobile replacement cycle. Demand for our aftermarket, or replacement, products varies based upon such factors as the level of new vehicle purchases, which initially displaces demand for aftermarket products, the severity of winter weather, which increases the demand for certain aftermarket products, and other factors, including the average useful life of parts and number of miles driven.

We may be unable to realize sales represented by our awarded business. The realization of future sales from awarded business is inherently subject to a number of important risks and uncertainties, including the number of vehicles that our OE customers will actually produce, the timing of that production and the mix of options that our OE customers and consumers may choose. For example, substantially all of our North American vehicle manufacturer customers slowed new vehicle production in 2001, with a slight increase in 2002. Given current economic conditions, we expect the North American light vehicle build to be approximately 16 million units in 2003, which is a slight decrease from 2002 levels. We also expect the European light vehicle production to decrease in 2003. In addition, our customers generally have the right to replace us with another supplier at any time for a variety of reasons and have increasingly demanded price decreases over the life of awarded business. Accordingly, we cannot assure you that we will in fact realize any or all of the future sales represented by our awarded business.

In many cases, we must commit substantial resources in preparation for production under awarded OE business well in advance of the customer's production start date. In certain instances, the terms of our OE customer arrangements permit us to recover these pre-production costs if the customer cancels the business through no fault of our company. Although we have been successful in recovering these costs under appropriate circumstances in the past, we can give no assurance that our results of operations will not be materially impacted in the future if we are unable to recover these types of pre-production costs related to OE cancellation of awarded business. See Note 11 to the consolidated financial statements included in Item 8 and "Management's Discussion and Analysis of Financial Condition and Results of Operations — Environmental and Other Matters" included in Item 7 for a discussion of recent cost recovery discussions with one of our OE customers.

The cyclicality of automotive production and sales could cause a decline in our financial condition and results. A decline in automotive sales and production would likely cause a decline in our sales to vehicle manufacturers, and could result in a decline in our results of operations and financial condition. The automotive industry has been characterized historically by periodic fluctuations in overall demand for vehicles due to, among other things, changes in general economic conditions and consumer preferences. These fluctuations generally result in corresponding fluctuations in demand for our products. The highly cyclical nature of the automotive industry presents a risk that is outside our control and that cannot be accurately predicted.

Longer product lives of automotive parts are adversely affecting aftermarket demand for some of our products. The average useful life of automotive parts has steadily increased in recent years due to innovations in products and technologies. The longer product lives allow vehicle owners to replace parts of their vehicles less often. As a result, a portion of sales in the aftermarket has been displaced. Additional increases in the average useful lives of automotive parts are likely to adversely affect the demand for our aftermarket products. Aftermarket sales represented approximately 26 percent of our net sales for 2002.

We may incur material product warranty costs. From time to time, we receive product warranty claims from our customers, pursuant to which we may be required to bear costs of repair or replacement of certain of our products. Vehicle manufacturers are increasingly requiring their outside suppliers to guarantee or warrant their products and to be responsible for the operation of these component products in new vehicles under warranties offered to consumers. Warranty claims may range from individual customer claims to full recalls of all products in the field. For example, see "Management's Discussion and Analysis of Financial Condition and Results of Operations- Environmental and Other Matters," included in Item 7 for a description of some warranty reserves established in 2002. We cannot assure you that costs associated with providing product warranties will not be material, or that those costs will not exceed any amounts reserved for them in our financial statements. For a description of our accounting policies regarding warranty reserves, see "Management's Discussion and Analysis of Financial Condition and Results of Operations — Critical Accounting Policies" included in Item 7.

The hourly workforce in the automotive industry is highly unionized and our business could be adversely affected by labor disruptions. Substantially all of the hourly employees of North American vehicle manufacturers are represented by the United Automobile, Aerospace and Agricultural Implement Workers of America under collective bargaining agreements. In addition, vehicle manufacturers and their employees in other countries are also subject to labor agreements. A work stoppage or strike at the production facilities of a significant customer, at our facilities or at a significant supplier could have an adverse impact on us by disrupting demand for our products and/or our ability to manufacture our products.

Consolidation among automotive parts customers and suppliers could make it more difficult for us to compete favorably. Our financial condition and results of operations could be adversely affected because the customer base for automotive parts is consolidating in both the original equipment market and aftermarket. As a result, we are competing for business from fewer customers. Due to the cost focus of these major customers, we have been, and expect to continue to be, required to reduce prices. We cannot be certain that we will be able to generate cost savings and operational improvements in the future that are sufficient to offset price reductions required by existing customers and necessary to win additional business.

Furthermore, the trend toward consolidation among automotive parts suppliers is resulting in fewer, larger suppliers who benefit from purchasing and distribution economies of scale. If we cannot achieve cost savings and operational improvements sufficient to allow us to compete favorably in the future with these larger companies, our financial condition and results of operations could be adversely affected due to a reduction of, or inability to increase, sales.

We are dependent on large customers for future revenues. We depend on major vehicle manufacturers for a substantial portion of our net sales. For example, during 2002, General Motors, Ford, Volkswagen, and DaimlerChrysler accounted for 19.8 percent, 13.3 percent, 10.1 percent, and 10.1 percent of our net

sales, respectively. The loss of all or a substantial portion of our sales to any of our large-volume customers could have a material adverse effect on our financial condition and results of operations by reducing cash flows and our ability to spread costs over a larger revenue base. We may make fewer sales to these customers for a variety of reasons, including: (1) loss of awarded business; (2) reduced or delayed customer requirements; or (3) strikes or other work stoppages affecting production by the customers.

We may not be able to successfully respond to the changing distribution channels for aftermarket products. Major automotive aftermarket retailers, such as AutoZone and Advance Auto Parts, are attempting to increase their commercial sales by selling directly to automotive parts installers in addition to individual consumers. These installers have historically purchased from their local warehouse distributors and jobbers, who are our more traditional customers. We cannot assure you that we will be able to maintain or increase aftermarket sales through increasing our sales to retailers. Furthermore, because of the cost focus of major retailers, we have occasionally been required to offer price concessions. Our failure to maintain or increase aftermarket sales, or to offset the impact of any reduced sales or pricing through cost improvements, could have an adverse impact on our business and operating results.

We may be unable to compete favorably in the highly competitive automotive parts industry. The automotive parts industry is highly competitive. Although the overall number of competitors has decreased due to ongoing industry consolidation, we face significant competition within each of our major product areas. The principal competitive factors are price, quality, service, product performance, design and engineering capabilities, new product innovation, global presence and timely delivery. We cannot assure you that we will be able to continue to compete favorably in this competitive market or that increased competition will not have a material adverse effect on our business by reducing our ability to increase or maintain sales or profit margins.

We may be unable to realize our business strategy of improving operating performance. We have either implemented or plan to implement strategic initiatives designed to improve our operating performance. The failure to achieve the goals of these initiatives could have a material adverse effect on our business, particularly since we rely on these initiatives to offset pricing pressures from our customers, as described above. We cannot assure you that we will be able to successfully implement or realize the expected benefits of any of these initiatives or that we will be able to sustain improvements made to date.

We are subject to risks related to our international operations. We have manufacturing and distribution facilities in many regions and countries, including Australia, China, India, North America, Europe and South America, and sell our products worldwide. For 2002, about 45 percent of our net sales were derived from operations outside North America. International operations are subject to various risks which could have a material adverse effect on those operations or our business as a whole, including:

- exposure to local economic conditions;
- exposure to local political conditions, including the risk of seizure of assets by foreign government;
- · currency exchange rate fluctuations;
- hyperinflation in certain foreign countries;
- controls on the repatriation of cash, including imposition or increase of withholding and other taxes on remittances and other payments by foreign subsidiaries; and
- · export and import restrictions.

Exchange rate fluctuations could cause a decline in our financial condition and results of operations. As a result of our international operations, we generate a significant portion of our net sales and incur a significant portion of our expenses in currencies other than the U.S. dollar. To the extent we are unable to match revenues received in foreign currencies with costs paid in the same currency, exchange rate fluctuations in that currency could have a material adverse effect on our business. For example, where we have significantly more costs than revenues generated in a foreign currency, we are subject to risk if that foreign currency appreciates against the U.S. dollar because the appreciation

effectively increases our cost in that country. From time to time, as and when we determine it is appropriate and advisable to do so, we will seek to mitigate the effect of exchange rate fluctuations through the use of derivative financial instruments. We cannot assure you, however, that we will continue this practice or be successful in these efforts.

The financial condition and results of operations of some of our operating entities are reported in foreign currencies and then translated into U.S. dollars at the applicable exchange rate for inclusion in our consolidated financial statements. As a result, appreciation of the U.S. dollar against these foreign currencies will have a negative impact on our reported revenues and operating profit while depreciation of the U.S. dollar against these foreign currencies will have a positive effect on reported revenues and operating profit. For example, our European operations were positively impacted in 2002 due to the strengthening of the Euro against the U.S. dollar. Our South American operations were negatively impacted by the devaluation in 2000 of the Brazilian currency as well as by the devaluation of the Argentine currency in 2002. We do not generally seek to mitigate this translation effect through the use of derivative financial instruments.

Changes in Prices of Raw Materials. Significant increases in the cost of certain raw materials used in our products, to the extent they are not timely reflected in the price we charge our customers or mitigated through long-term supply contracts, could adversely impact our results.

Other Factors. In addition to the factors described above, we may be impacted by a number of other matters and uncertainties, including: (i) potential legislation, regulatory changes and other governmental actions, including the ability to receive regulatory approvals and the timing of such approvals; (ii) new technologies that reduce the demand for certain of our products or otherwise render them obsolete; (iii) our ability to integrate operations of acquired businesses quickly and in a cost effective manner; (iv) changes in distribution channels or competitive conditions in the markets and countries where we operate; (v) capital availability or costs, including changes in interest rates, market perceptions of the industries in which we operate or ratings of securities; (vi) increases in the cost of compliance with regulations, including environmental regulations, and environmental liabilities in excess of the amount reserved; (vii) changes by the Financial Accounting Standards Board or the Securities and Exchange Commission of authoritative accounting principles generally accepted in the United States of America or policies; (viii) acts of war or terrorism and the impact of these acts on economic, financial and social conditions in the countries where we operate; and (ix) the timing and occurrence (or non-occurrence) of transactions and events which may be subject to circumstances beyond our control.

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ITEM 1. BUSINESS.

TENNECO AUTOMOTIVE INC.

Our company, Tenneco Automotive Inc., is one of the world's leading manufacturers of automotive emissions control and ride control products and systems for both the original equipment market and the replacement market, or aftermarket. As used herein, the term "Tenneco", "we", "us", "our", or the "Company" refers to Tenneco Automotive Inc. and its consolidated subsidiaries.

Tenneco was incorporated in Delaware in 1996 under the name "New Tenneco Inc." ("New Tenneco") as a wholly owned subsidiary of the company then known as Tenneco Inc. ("Old Tenneco"). At that time, Old Tenneco's major businesses were shipbuilding, energy, automotive and packaging. On December 11, 1996, Old Tenneco completed the transfer of its automotive and packaging businesses to us, and spun off our company to its public stockholders (the "1996 Spin-off"). In connection with the 1996 Spin-off, Old Tenneco also spun off its shipbuilding division to its public stockholders, the remaining energy company was acquired by El Paso Natural Gas Company and we changed our name from New Tenneco to Tenneco Inc. Unless the context otherwise requires, for periods prior to December 11, 1996, references to "Tenneco", "we", "us", "our" or the "Company" also refer to Old Tenneco.

In a series of transactions commencing in January 1999 and culminating with the November 4, 1999 spin off to our shareholders of the common stock of Tenneco Packaging Inc., now known as Pactiv Corporation (the "1999 Spin-off"), we separated our packaging businesses from our automotive business. As a result of these 1999 transactions, our former specialty and paperboard packaging operating segments are presented as discontinued operations in certain of the accompanying financial statements.

In March 2002, we amended our senior credit facility to revise the financial covenant ratios for 2002 through 2004, exclude from the calculation of our financial covenant ratios up to \$60 million (before taxes) of charges and expenses related to cost reduction initiatives and allow us to enter into sale and leaseback transactions covering up to \$200 million of our assets with the proceeds used to reduce senior debt and allowed us to exchange certain debt securities for common equity (to the extent we determine to pursue such actions in the future). Note 4 to the consolidated financial statements included in Item 8 and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Item 7 have more information about our debt and the amendments to the senior credit facility.

Our Internet address is www.tenneco-automotive.com. We make our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports, as filed with or furnished to the Securities and Exchange Commission ("SEC"), available free of charge on our Internet website as soon as reasonably practicable after submission to the SEC. The contents of our website are not, however, a part of this report.

Under the Sarbanes-Oxley Act of 2002, and rules recently adopted thereunder, we will be required to disclose in future annual reports on Form 10-K (i) whether the Audit Committee of our Board of Directors includes a "financial expert" who is "independent" for purposes of those provisions, (ii) specified information, beyond what is currently required to be disclosed, regarding fees paid to our independent public accountants and (iii) specified information regarding whether we maintain a code of ethics applicable to our chief executive officer and senior financial management. For information regarding the matters described in clauses (i) and (ii), above, see the section entitled "Report of Audit Committee" in our definitive Proxy Statement for the Annual Meeting of Stockholders to be held May 13, 2003. For information regarding the matter described in clause (iii), above, see "Directors and Executive Officers of the Registrant" included under Item 10 in this annual report on Form 10-K.

CONTRIBUTIONS OF MAJOR BUSINESSES

For information concerning our operating segments, geographic areas and major products or groups of products, see Note 10 to the consolidated financial statements of Tenneco Automotive Inc. and Consolidated Subsidiaries included in Item 8. The following tables summarize for each of our operating segments for the periods indicated: (i) net sales and operating revenues; (ii) earnings before interest expense, income taxes and minority interest ("EBIT"); and (iii) capital expenditures. You should also read "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Item 7 for information about certain costs and charges included in our results.

Net Sales and Operating Revenues:

Europe

Other

	2002			2001		2000		
			(Dollar Amounts in Millions)					
North America	\$1	,906	55%	\$1,7	99	53%	\$1,95	6 55%
Europe	1	,254	36	1,3	05	39	1,29	2 37
Other		352	10	3	18	10	34	8 10
Intergroup sales		(53)	(1)	(58)	_(2)	(6	8) (2)
Total		,459	100%	\$3,3	<u>64</u>	100%	\$3,52	<u>100</u> %
EBIT:								
		2002			2001		2	2000
	(Dollar Amounts in Millions)							
North America	\$	129	76%	\$	52	57%	\$ 6	8 57%

18

22

\$ 169

11

13

100%

23

17

92

25

18

100%

40

12

33

10

100%

Capital Expenditures:

	 2002			2001	<u> </u>		2000)
	(Dollar Amounts in			in Millio	Aillions)			
North America	\$ 66	47%	\$	50	39%	\$	71	49%
Europe	56	41		64	50		59	40
Other	 16	_12		13	· <u>11</u>		16	_11
Total	\$ 138	100%	\$	127	100%	\$	146	100%

Interest expense, income taxes, and minority interest that were not allocated to our operating segments are:

	2002	2001	2000
		(Millions)	·
Interest expense (net of interest capitalized)	\$141	\$170	\$186
Income tax expense (benefit)	(7)	51	(27)
Minority interest	4	1	2

DESCRIPTION OF OUR BUSINESS

With 2002 revenues of over \$3.4 billion, we are one of the world's largest producers of automotive emissions control and ride control systems and products. We serve both original equipment manufacturers and replacement markets worldwide through leading brands, including Monroe®, Rancho® and Fric RotTM ride control products and Walker® and GilletTM emissions control products.

As an automotive parts supplier, we design, market and sell individual component parts for vehicles as well as groups of components that are combined as modules or systems within vehicles. These parts, modules and systems are sold globally to the vast majority of vehicle manufacturers and throughout all aftermarket distribution channels.

Overview of Automotive Parts Industry

The automotive parts industry is generally separated into two categories: (1) "original equipment" or "OE" sales, in which parts are sold in large quantities directly for use by original equipment vehicle manufacturers ("OEMs"); and (2) "aftermarket" sales, in which parts are sold as replacement parts in varying quantities to a wide range of wholesalers, retailers and installers. In the OE market, parts suppliers are generally divided into tiers — "Tier 1" suppliers, who provide their products directly to OEMs, and "Tier 2" or "Tier 3" suppliers, who sell their products principally to other suppliers for combinations into the other suppliers' own product offerings.

Demand for automotive parts in the OE market is generally a function of the number of new vehicles produced, which in turn is a function of prevailing economic conditions and consumer preferences. In 2002, the number of light vehicles produced was 16.4 million in North America, and 19.3 million in Europe and 20.7 million in the rest of the world. Worldwide new light vehicle production is forecasted to increase to over 61.0 million in 2005 from approximately 56.4 million in 2002. Although OE demand is tied to planned vehicle production, parts suppliers also have the opportunity to grow through increasing their product content per vehicle, by further penetrating business with existing customers and by gaining new customers and markets. Companies with global presence and advanced technology, engineering, manufacturing and support capabilities, such as our company, are, we believe, well positioned to take advantage of these opportunities.

Demand for aftermarket products is driven by the quality of OE parts, the number of vehicles in operation, the average age of the vehicle fleet, vehicle usage and the average useful life of vehicle parts. Although more vehicles are on the road than ever before, the aftermarket has experienced weakness due to improved quality of OE parts and increases in average useful lives of automotive parts as a result of technological innovation. In addition, the decline from 1995 to 2000 of the number of vehicles in the six to ten year-old vehicle segment (from 63.7 million to 56.8 million) — when cars generally need first-line replacement parts such as those offered by us — is also driving aftermarket softness. While we believe some opportunity exists for aftermarket replacements to increase as the newer vehicles recently put on the road increase into the six to ten year category, suppliers are increasingly being required to deliver innovative aftermarket products that upgrade the performance or safety of a vehicle's original components to drive aftermarket demand.

Industry Trends

Currently, we believe several significant existing and emerging trends are dramatically impacting the automotive industry. As the dynamics of the automotive industry change, so do the roles, responsibilities and relationships of its participants. Key trends that we believe are affecting automotive parts suppliers include:

Outsourcing and Demand for Systems and Modules

OE manufacturers are increasingly moving towards outsourcing automotive parts and systems to simplify the vehicle assembly process, lower costs and reduce vehicle development time. Outsourcing

allows OE manufacturers to take advantage of the lower cost structure of the automotive parts suppliers and to benefit from multiple suppliers engaging in simultaneous development efforts. Furthermore, development of advanced electronics has enabled formerly independent vehicle components to become "interactive," leading to a shift in demand from individual parts to fully integrated systems. As a result, automotive parts suppliers offer OE manufacturers component products individually, as well as in a variety of integrated forms such as modules and systems:

- "Modules" are groups of component parts arranged in close physical proximity to each other within a vehicle. Modules are often assembled by the supplier and shipped to the original equipment manufacturer for installation in a vehicle as a unit. Seats, instrument panels, axles and door panels are examples.
- "Systems" are groups of component parts located throughout a vehicle which operate together to provide a specific vehicle function. Anti-lock braking systems, safety restraint systems, roll control systems, emissions control and powertrain systems are examples.

This shift in demand towards fully integrated systems has created the role of the Tier 1 systems integrator. These systems integrators will increasingly have the responsibility to execute a number of activities, such as design, product development, engineering, testing of component systems and purchasing from Tier 2 suppliers. We are an established Tier 1 supplier with more than ten years of product integration experience. We have modules or systems for 42 vehicle platforms in production worldwide and modules or systems for three additional platforms under development. For example, we supply ride control modules for the Chrysler JR/Sebring/Stratus and the exhaust emissions control system for the Porsche Boxster.

Global Consolidation of OE Customers

Given the trend in business combinations among vehicle manufacturers — such as the Daimler-Chrysler merger and Ford's acquisition of Volvo — as well as the global OE expansion over the last decade, OEMs are increasingly requiring suppliers to provide parts on a global basis. As the customer base of OEMs has consolidated and emerging markets have become more important to achieving growth, suppliers must be prepared to provide products any place in the world.

- Growing Importance of Emerging Markets. Because the North American and Western European automotive markets are relatively mature, OE manufacturers are increasingly focusing on emerging markets for growth opportunities, particularly China, Eastern Europe, India and Latin America. This increased OE focus has, in turn, increased the growth opportunities in the aftermarkets in these regions.
- Governmental Tariffs and Local Parts Requirements. Many governments around the world require
 that vehicles sold within their country contain specified percentages of locally produced parts.
 Additionally, some governments place high tariffs on imported parts.
- Location of Production Closer to End Markets. OE manufacturers and parts suppliers have relocated production globally on an "onsite" basis that is closer to end markets. This international expansion allows suppliers to pursue sales in developing markets and take advantage of relatively lower labor costs.

With facilities around the world, including the key regions of North America, South America, Europe and Asia, we can supply our customers on a global basis.

Global Rationalization of OE Vehicle Platforms

OE manufacturers are increasingly designing "global platforms". A global platform is a basic mechanical structure of a vehicle that can accommodate different features and is in production and/or development in more than one region. Thus, OE manufacturers can design one platform for a number of similar vehicle models. This allows manufacturers to realize significant economies of scale through limiting variations across items such as steering columns, brake systems, transmissions, axles, exhaust systems,

support structures and power window and door lock mechanisms. We believe that this shift towards standardization will have a large impact on automotive parts suppliers, who should experience a reduction in production costs as OE manufacturers reduce variations in components. We also expect parts suppliers to experience higher production volumes per unit and greater economies of scale, as well as reduced total investment costs for molds, dies and prototype development. Light vehicle platforms of over one million units are expected to grow from 14 percent to 39 percent of global OE production from 1999 to 2006.

Increasing Technologically Sophisticated Content

As consumers continue to demand competitively priced vehicles with increased performance and functionality, the number of sophisticated components utilized in vehicles is increasing. By replacing mechanical functions with electronics and by integrating mechanical and electronic functions within a vehicle, OE manufacturers are achieving improved emissions control, improved safety and more sophisticated features at lower costs.

Automotive parts customers are increasingly demanding technological innovation from suppliers to address more stringent emissions and other regulatory standards and to improve vehicle performance. To develop innovative products, systems and modules, we have invested \$202 million over the past three years into engineering, research and development and we continuously seek to take advantage of our technology investments and brand strength by extending our products into new markets and categories. For example, we have developed several adaptive damping systems, which reduce undesirable vehicle motion. Also, we have developed the self-lubricating elastomer, which has the additional ability to reduce friction between moving components in a suspension system, thereby reducing noise and vibration. We plan to introduce our Tubular Integrated (catalytic) Converter (TIC) to major vehicle manufacturers in North America. We have also introduced new exhaust-valve technology for cylinder-deactivated engines.

Increasing Environmental Standards

Automotive parts suppliers and OE manufacturers are designing products and developing materials to comply with increasingly stringent environmental requirements. Government regulations adopted over the past decade require substantial reductions in automobile tailpipe emissions, longer warranties on parts of an automobile's pollution control equipment and additional equipment to control fuel vapor emissions. Some of these regulations also mandate more frequent emissions and safety inspections for the existing fleet of vehicles. Manufacturers have responded by focusing their efforts towards technological development to minimize pollution. As a leading supplier of emissions control systems with strong technical capabilities, we believe we are well positioned to benefit from more rigorous environmental standards. For example, we have recently developed the diesel particulate filter which is designed to meet stricter air quality regulations in Europe. In our ride control product line, we have invested both in North America and Europe in new water-based paint systems to replace older solvent-based technology. These new water-based systems significantly reduce the amount of VOC's (volatile organic compounds) that are evaporated from the paint during the drying process.

Extended Product Life of Automotive Parts; Declining Vehicle Fleet Age

The average useful life of automotive parts — both OE and replacement — has been steadily increasing in recent years due to innovations in products and technologies. The longer product lives allow vehicle owners to replace parts of their vehicles less often. As a result, although more vehicles are on the road than ever before, the aftermarket has experienced weakness. In addition, the average age of the vehicle fleet on the road has been declining in the last several years, further contributing to softness in the aftermarket. Accordingly, a supplier's future viability in the aftermarket will depend, in part, on its ability to reduce costs and leverage its advanced technology and recognized brand names to maintain or achieve additional sales. As a Tier 1 OE supplier, we believe we are well positioned to leverage our products and technology into the aftermarket. Furthermore, we continue to believe some opportunity exists for replacement of certain parts to increase as the newer vehicles that have recently been put on the road increase in age to the six to ten year category.

Changing Aftermarket Distribution Channels

In North America, during the last decade, the number of retail automotive parts chains, such as AutoZone and Advance Auto Parts, has been growing while the number of traditional automotive parts stores ("jobbers") that sell to installers has been declining. From 1991 to 2001, the number of retail automotive parts stores increased from approximately 10,000 to approximately 15,000, while the number of jobbers has decreased from approximately 25,000 to approximately 19,000. As a result, the traditional three-step distribution channel (full-line warehouse, jobber, installer) is redefining itself through two-step distribution and continued formation of buying groups. In addition, since retailers are attempting to grow their commercial sales to automotive parts installers, they are increasingly adding premium brands to their product portfolios. This enables them to offer the option of a premium brand, which is often preferred by their commercial customers, or a standard product, which is often preferred by their retail customers. We believe we are well positioned to respond to this continuing aftermarket situation because of our focus on cost reduction and high-quality, premium brands.

Supplier Consolidation

Over the past few years, automotive suppliers have been consolidating in an effort to become more global, have a broader, more integrated product offering and gain scale economies in order to remain competitive amidst growing pricing pressures and increased outsourcing demands from the OEMs. Industry forecasters estimate that consolidation will drive the number of Tier 1 automotive parts suppliers from around 2,000 in the year 2000 to 150 by 2008 and the number of Tier 2/3 suppliers from around 6,000 in the year 2000 to around 800 Tier 2 suppliers by 2008. A supplier's viability in this consolidating market will depend, in part, on its ability to maintain and increase operating efficiencies and provide value-added services.

Safety

Vehicle safety continues to gain increased industry attention and play a critical role in consumer purchasing decisions. As such, OEMs are seeking out suppliers with new technologies, capabilities and products that have the ability to advance vehicle safety. Continued research and development by select automotive suppliers in rollover protection systems, smart airbag systems, braking electronics and safer, more durable materials has dramatically advanced the market for safety products and its evolving functional demands. Those suppliers able to enhance vehicle safety through innovative products and technologies have a distinct competitive advantage with the consumer, and thus their OEM customers.

On the aftermarket side of our business, we launched in 2002 a global marketing campaign to educate consumers on the critical role shock absorbers and struts play in vehicle safety. This campaign concentrates on how these products affect the Safety Triangle — steering, stopping and stability — and emphasizes the need to replace worn shocks and struts for safe driving. We plan on expanding our marketing efforts in 2003 to educate both installers and consumers in North America and Europe.

Analysis of Revenues

The following table provides, for each of the years 2000 through 2002, information relating to our net sales, by primary product lines and customer categories.

	Net Sales Years Ended December 31,			
	2002			
		(Millions)		
Emissions Control Systems & Products				
Aftermarket	\$ 359	\$ 387	\$ 445	
OE market	1,880	1,805	1,758	
	2,239	2,192	2,203	
Ride Control Systems & Products				
Aftermarket	549	548	610	
OE market	<u>671</u>	624	<u>715</u>	
	_1,220	1,172	1,325	
Total	<u>\$3,459</u>	<u>\$3,364</u>	\$3,528	

Brands

In each of our operating segments, we manufacture and market leading brand names. Monroe® ride control products and Walker® exhaust products are two of the most recognized brand names in the automotive parts industry. We emphasize product value differentiation with these and other key brands such as Monroe Sensa-Trac® and Reflex® (shock absorbers and struts), Quiet-Flow® (mufflers), DynoMax® (performance exhaust products), Rancho® (ride control products for the high performance light truck market) and Clevite® (elastomeric vibration control components).

Customers

We have developed long-standing business relationships with our customers around the world. In each of our operating segments, we work together with our customers in all stages of production, including design, development, component sourcing, quality assurance, manufacturing and delivery. With a balanced mix of OE and aftermarket products and facilities in major markets worldwide, we believe we are well-positioned to meet customer needs. We believe we have a strong, established reputation with customers for providing high-quality products at competitive prices, as well as for timely delivery and customer service.

Worldwide we serve more than 25 different original equipment manufacturers, and our products or systems are included on five of the top 10 passenger car models produced in North America and Western Europe and nine of the top 10 light truck models produced in North America for 2002. During 2002, our OE customers included:

North America

CAMI ClubCar DaimlerChrysler

Ford Freightliner General Motors Harley-Davidson

Honda Isuzu

Navistar/International

Nissan Paccar Volkswagen Volvo Truck/Mack

E-Z Go Car

South America

DaimlerChrysler Ford

General Motors Honda

Mitsubishi
PSA Peugeot/Citroen

Renault Scania Volkswagen Europe BMW

DaimlerChrysler

Ford

General Motors/Opel

Mitsubishi Nissan Paccar

PSA-Peugeot/Citroen

Porsche Renault Scania Toyota Volkswagen Volvo Truck

Australia Ford

General Motors/Holden

Mazda Mitsubishi

Navistar/International

Toyota
Club Car
Volvo Truck

Asia

First Auto Works DaimlerChrysler

Ford

General Motors

Isuzu Nissan

PSA-Peugeot/Citroen

Telco Toyota

TVS Motor Co. Volkswagen

During 2002, our aftermarket customers were comprised of full-line and specialty warehouse distributors, retailers, jobbers, installer chains and car dealers. These customers included such wholesalers and retailers as National Auto Parts Association (NAPA), Sears and Advance Auto Parts in North America and Temot and Auto Distribution International in Europe. We believe we have a balanced mix of aftermarket customers, with our top 10 aftermarket customers accounting for 33.9 percent of our total net aftermarket sales and only 8.9 percent of our total net sales for 2002.

General Motors accounted for approximately 19.8 percent, 19.6 percent, and 16.6 percent of our net sales in 2002, 2001, and 2000, respectively, Ford accounted for approximately 13.3 percent, 10.6 percent and 13.5 percent of our net sales in 2002, 2001, and 2000, respectively, DaimlerChrysler accounted for approximately 10.1 percent, 10.4 percent, and 11.5 percent of our net sales in 2002, 2001, and 2000, respectively and Volkswagen accounted for approximately 10.9 percent and 10.1 percent of our net sales in 2002 and 2001, respectively. No other customer accounted for more than 10 percent of our net sales for those years.

Competition

In North America, Europe and the rest of the world, we operate in highly competitive markets. Customer loyalty is a key element of competition in these markets and is developed through long-standing relationships, customer service, value-added products and timely delivery. Product pricing and services provided are other important competitive factors.

In both the OE market and aftermarket, we compete with the vehicle manufacturers, some of which are also customers of ours, and numerous independent suppliers. In the OE market, we believe that we are among the top four suppliers in the world for both emissions control and ride control products and systems. In the aftermarket, we believe that we are the market share leader in the supply of both emissions control and ride control products in the markets we serve throughout world.

Seasonality

Our business is somewhat seasonal. OE manufacturers' production requirements are generally higher in the first three quarters of the year as compared to the fourth quarter. Last year, for example, this seasonality adversely affected our fourth quarter results of operations as compared to the first three quarters. We believe this seasonality is due, in part, to consumer demand for new vehicles softening during the holiday season and as a result of the winter months in North America and Europe. Also, the major North American OE manufacturers generally close their production facilities for the last two weeks of the year. Our aftermarket business also experiences seasonality. Demand for aftermarket products increases during the spring as drivers prepare for the summer driving season.

Emissions Control Systems

Vehicle emissions control products and systems play a critical role in safely conveying noxious exhaust gases away from the passenger compartment and reducing the level of pollutants and engine exhaust noise to an acceptable level. Precise engineering of the exhaust system — from the manifold that connects an engine's exhaust ports to an exhaust pipe, to the catalytic converter that eliminates pollutants from the exhaust, to the muffler — leads to a pleasant, tuned engine sound, reduced pollutants and optimized engine performance.

We design, manufacture and distribute a variety of products and systems designed to optimize engine performance, acoustic tuning and weight, including the following:

- Mufflers and resonators Devices to provide noise elimination and acoustic tuning;
- Catalytic converters Devices used to convert harmful gaseous emissions, such as carbon monoxide, from a vehicle's exhaust system into harmless components such as water vapor and carbon dioxide;
- Exhaust manifolds Components that collect gases from individual cylinders of a vehicle's engine and direct them into a single exhaust pipe;
- Pipes Utilized to connect various parts of both the hot and cold ends of an exhaust system;
- Hydroformed tubing Forms into various geometric shapes, such as Y-pipes or T-pipes, which provides optimization in both design and installation as compared to conventional pipes; and
- Hangers and isolators Used for system installation and noise elimination.

We entered this product line in 1967 with the acquisition of Walker Manufacturing Company, which was founded in 1888. When the term "Walker" is used in this document, it refers to our subsidiaries and affiliates that produce emissions control products and systems.

We supply our emissions control offerings to over 15 auto-makers for use on over 100 vehicle models, including four of the top 10 passenger cars produced in North America and Western Europe and six of the top 10 light trucks produced in North America in 2002. With the acquisition of Heinrich Gillet GmbH & Co. in 1994, we also became one of Europe's leading OE emissions control systems suppliers.

In the aftermarket, we manufacture, market and distribute replacement mufflers for virtually all North American, European, and Asian makes of light vehicles under brand names including Quiet-Flow®, TruFit® and AluminoxTM, in addition to offering a variety of other related products such as pipes and catalytic converters (Walker Perfection®). We also serve the specialty exhaust aftermarket, where our key

offerings include Mega-FlowTM exhaust products for heavy-duty vehicle applications and DynoMax® high performance exhaust products.

The following table provides, for each of the years 2000 through 2002, information relating to our sales of emissions control products and systems for certain geographic areas:

sales of chinssions control products and systems for cortain geographic areas.	Percentage of Net Sales Years Ended December 31			
	2002	2001	2000	
United States				
Aftermarket	20%	26%	26%	
OE market	80	74	74	
	100%	100%	100%	
Foreign Sales		===		
Aftermarket	13%	13%	16%	
OE market	87	87	84	
	100%	100%	100%	
Total Sales by Geographic Area(a)		. *		
United States	40%	36%	41%	
European Union	40	44	40	
Canada	10	10	9	
Other areas	. 10	10	10	
	100%	100%	100%	

⁽a) See Note 10 to the consolidated financial statements included under Item 8 for information about our foreign and domestic operations.

Ride Control Systems

Superior ride control is governed by a vehicle's suspension system, including its shock absorbers and struts. Shock absorbers and struts help maintain vertical loads placed on a vehicle's tires to help keep the tires in contact with the road. A vehicle's ability to steer, brake and accelerate depends on the contact between the vehicle's tires and the road. Worn shocks and struts can allow excess weight transfer from side to side, which is called "roll," from front to rear, which is called "pitch," and up and down, which is called "bounce." Variations in tire-to-road contact can affect a vehicle's handling and braking performance and the safe operation of a vehicle. Shock absorbers are designed to control vertical loads placed on tires by providing resistance to vehicle roll, pitch and bounce. Thus, by maintaining the tire to road contact, ride control products are designed to function as safety components of a vehicle, in addition to providing a comfortable ride.

We design, manufacture and distribute a variety of ride control products and systems. Our ride control offerings include:

- Shock absorbers A broad range of mechanical shock absorbers and related components for lightand heavy-duty vehicles. We supply both twin-tube and monotube shock absorbers to vehicle manufacturers and the aftermarket;
- Struts A complete line of struts and strut assemblies for light vehicles;
- Vibration control components (Clevite®) Generally rubber-to-metal bushings and mountings to reduce vibration between metal parts of a vehicle. Our offerings include a broad range of suspension arms, rods and links for light- and heavy-duty vehicles;
- Kinetic® roll control A suite of roll control, near equal wheel loading systems ranging from simple mechanical systems to complex hydraulic systems featuring proprietary and patented

technology. The Kinetic technology was incorporated on the Citroen World Rally Car that is featured in the World Rally Championship 2003;

- Advanced suspension systems Electronically adjustable shock absorbers and suspension systems that change performance based on vehicle inputs such as steering and braking; and
- Other We also offer other ride control products such as load assist products, springs, steering stabilizers, adjustable suspension systems, suspension kits and modular assemblies.

We supply our ride control offerings to over 25 vehicle-makers for use on over 150 vehicle models, including nine of the top 10 light truck models produced in North America for 2002. We also supply OE ride control products and systems to a range of heavy-duty and specialty vehicle manufacturers including Volvo, Mack Truck, Caterpillar, International Truck and Engine (Navistar), Freightliner, PACCAR and E-Z Go Car (golf carts).

In the ride control aftermarket, we manufacture, market and distribute replacement shock absorbers for virtually all North American, European and Asian makes of light vehicles under several brand names including Gas Matic[®], Sensa-Trac[®], Monroe Reflex[®] and Monroe Adventure[®], as well as Clevite[®] for elastomeric vibration control components. We also sell ride control offerings for the heavy duty, off-road and specialty aftermarket, such as our Gas-Magnum[®] shock absorbers for the North American heavy-duty category.

We entered the ride control product line in 1977 with the acquisition of Monroe Auto Equipment Company, which was founded in 1916 and introduced the world's first modern tubular shock absorber in 1930. When the term "Monroe" is used in this document it refers to our subsidiaries and affiliates that produce ride control products and systems.

The following table provides, for each of the years 2000 through 2002, information relating to our sales of ride control equipment for certain geographic areas:

	Percentage of Net Sales Year Ended December 31,					
	2002	2001	2000			
United States						
Aftermarket	45%	45%	42%			
OE market	55	55	58			
	100%	100%	100%			
Foreign Sales						
Aftermarket	47%	49%	51%			
OE market	_53	<u>51</u>	49			
	100%	100%	100%			
Total Sales by Geographic Area(a)						
United States	52%	50%	49%			
European Union	27	27	27			
Canada	4	4	5			
Other areas	<u>17</u>	<u>19</u>	<u>19</u>			
	<u>100</u> %	100%	100%			

⁽a) See Note 10 to the consolidated financial statements included under Item 8 for information about our foreign and domestic operations.

Sales, Marketing and Distribution

We have separate and distinct sales and marketing efforts for our OE and aftermarket businesses.

For OE sales, our sales and marketing team is an integrated group of professionals, including skilled engineers and program managers, that are organized by customer and product type (e.g. ride control and emissions control). Our sales and marketing team provides the appropriate mix of operational and technical expertise needed to interface successfully with the OEMs. Our new business "capture process" involves working closely with the OEM platform engineering and purchasing team. Bidding on OE automotive platforms typically encompasses many months of engineering and business development activity. Throughout the process, our sales team, program managers and product engineers assist the OE customer in defining the project's technical and business requirements. A normal part of the process includes our engineering and sales personnel working on customers' integrated product teams, and assisting with the development of component/system specifications and test procedures. Given that the OE business involves long-term production contracts awarded on a platform-by-platform basis, our strategy is to leverage our engineering expertise and strong customer relationships to obtain platform awards and increase operating margins.

For aftermarket sales and marketing, since 1996 we maintained a common team for both ride control and emissions control products that has been organized primarily by customer. Beginning in the first quarter 2001, the North American sales force was reorganized into brand-specific teams, with a separate group for Monroe®, Rancho® and Walker®. We sell aftermarket products through five primary channels of distribution: (1) the traditional three-step distribution system: full line warehouse distributors, jobbers and installers; (2) the specialty two-step distribution system: specialty warehouse distributors that carry only specified automotive product groups and installers; (3) direct sales to retailers; (4) direct sales to installer chains; and (5) direct sales to car dealers. Our aftermarket sales and marketing representatives cover all levels of the distribution channel, stimulating interest in our products and helping our products move through the distribution system. Also, to generate demand for our products from end-users, we run print and television advertisements and offer pricing promotions. We were one of the first parts manufacturers to offer business to business services to customers with TA-Direct, an on-line order entry and customer service tool. In addition, we maintain detailed web sites for each of the Walker®, Monroe®, Rancho® and DynoMax® brands and our heavy duty products.

Manufacturing and Engineering

We focus on achieving superior product quality at the lowest operating costs possible and generally use state-of-the-art manufacturing processes to achieve that goal. Our manufacturing strategy centers on a lean production system designed to reduce overall costs — especially indirect costs — while maintaining quality standards and reducing manufacturing cycle time. We deploy new technology where it makes sense to differentiate our processes from our competitors' or to achieve balance in one-piece flowthrough production lines.

Emissions Control

Our consolidated businesses operate 9 emissions control manufacturing facilities in the U.S. and 27 emissions control manufacturing facilities outside of the U.S. We operate 4 of these international facilities through joint ventures in which we own a controlling interest. We also operate 4 additional manufacturing facilities outside of the U.S. through 4 joint ventures in which we hold a noncontrolling interest. We operate 4 emissions control engineering and technical facilities worldwide and share 2 other such facilities with our ride control operations.

Within each of our emissions control manufacturing facilities, operations are organized by component (muffler, catalytic converter, pipe, resonator, and manifold). Our manufacturing systems incorporate cell-based designs, allowing work-in-process to move through the operation with greater speed and flexibility. We continue to invest in plant and equipment to stay on top of the industry. For instance, in our

Harrisonburg, Virginia, aftermarket manufacturing facility, we have developed a completely automated production process that handles all facets of pipe production from tube milling to pipe bending.

In an effort to further improve our OE customer service and position ourselves as a Tier-1 OE systems supplier, we have been developing our emissions control manufacturing operations into "just-intime" or "JIT" systems. In this system, a JIT facility located close to our OE customer's manufacturing plant receives product components from both our manufacturing operations and independent suppliers, handles the module assembly and then ships products to the OEMs on an as-needed basis. To manage the JIT functions and material flow, we have advanced computerized material requirements planning systems linked with our customers' and supplier partners' resource management systems. We have 2 emissions control JIT assembly facilities in the United States and 12 in the rest of the world, including 3 that are operated through non-controlled joint ventures.

During the 1990's, we expanded our converter and emission system design, development, test and manufacturing capabilities. Our engineering capabilities now include advanced predictive design tools, advanced prototyping processes and state-of-the-art testing equipment. This expanded technological capability makes us a "full system" integrator, supplying complete emissions control systems from the manifold to the tailpipe, to provide full emission and noise control. It also allows us to provide JIT delivery and, when feasible, sequence delivery of emissions control systems to meet customer production requirements. For 2003, we plan to introduce our new Tubular Integrated (catalytic) Converter (TIC) to major vehicle manufacturers in North America. We have also introduced new exhaust-valve technology for cylinder-deactivated engines.

Ride Control

Our consolidated businesses operate 9 ride control manufacturing facilities in the U.S. and 20 ride control manufacturing facilities outside the U.S. We operate 5 of these international facilities through joint ventures in which we own a controlling interest. We operate 4 engineering and technical facilities worldwide and share 2 other such facilities with Walker.

Within each of our ride control manufacturing facilities, operations are organized by product (shocks, struts, vibration control products) and include computer numerically controlled, numerically controlled and conventional machine centers; tube milling and drawn-over-mandrel manufacturing equipment; metal inert gas and resistance welding; powdered metal pressing and sintering; chrome plating; stamping; and assembly/test capabilities. Our manufacturing systems incorporate cell-based designs, allowing work-in-process to move through the operation with greater speed and flexibility.

As in the emissions control business, in an effort to further improve our OE customer service and position us as a Tier 1 OE module supplier, we have been developing our manufacturing operations into JIT systems. We have 2 JIT ride control assembly facilities in the United States and 3 additional JIT ride control facilities in the rest of the world.

In designing our shock absorbers and struts, we use advanced engineering and test capabilities to provide product reliability, endurance and performance. Our engineering capabilities feature advanced computer aided design equipment and testing facilities. Our dedication to innovative solutions has led to such technological advances as:

- Adaptive damping systems adapts to the vehicle's motion to better control undesirable vehicle
 motions;
- Electronically adjustable suspensions changes suspension performance based on a variety of inputs such as steering, braking, vehicle height, and velocity; and
- Air leveling systems manually or automatically adjust the height of the vehicle.

Conventional shock absorbers and struts generally compromise either ride comfort or vehicle control. Our innovative grooved-tube, gas-charged shock absorbers and struts provide both ride comfort and vehicle control, resulting in improved handling, less roll, reduced vibration and a wider range of vehicle control.

This technology can be found in our premium quality Sensa-Trac® shock absorbers. In late 1997, we further enhanced this technology by adding the SafeTechTM fluon banded piston, which improves shock absorber performance and durability. In 1999, we introduced the Monroe Reflex® shock absorber, which incorporates our Impact SensorTM device. This technology permits the shock absorber to automatically switch in milliseconds between firm and soft compression damping when the vehicle encounters rough road conditions, thus maintaining better tire-to-road contact and improving handling and safety.

Quality Control

Quality control is an important part of our production process. Our quality engineers establish performance and reliability standards in the product's design stage, and use prototypes to confirm the component/system can be manufactured to specifications. Quality control is also integrated into the manufacturing process, with shop operators being responsible for quality control of their specific work product. In addition, our inspectors test work-in-progress at various stages to ensure components are being fabricated to meet customers' requirements.

We believe our commitment to quality control and sound management practices and policies is demonstrated by our successful participation in the International Standards Organization/Quality Systems certification process (ISO/QS). ISO/QS certifications are yearly audits that certify that a company's facilities meet stringent quality and business systems requirements. Without either ISO or QS certification, we would not be able to supply OEMs locally or globally. Of those manufacturing facilities where we have determined that ISO 9000 certification is required or would provide us with an advantage in securing additional business, approximately 95 percent have achieved ISO 9000 certification and we are pursuing certification of the remaining five percent. Of those manufacturing facilities where we have determined that QS certification is required to service our customers or would provide us with an advantage in securing additional business, approximately 91 percent have achieved QS-9000 certification, and we are pursuing certification of the remaining nine percent.

Business Strategy

Our objective is to enhance profitability by leveraging our global position in the manufacture of emissions control and ride control products and systems. We intend to apply our competitive strengths and balanced mix of products, markets, customers and distribution channels to capitalize on many of the significant existing and emerging trends in the automotive industry. The key components of our business strategy are described below.

Enhance Global Engineering and Advanced System Capabilities

We focus on the development of highly engineered systems and complex assemblies and modules, which are designed to provide value-added solutions to customers and generally increase vehicle content and carry higher profit margins than individualized components. In addition, we have developed integrated, electronically linked global engineering and manufacturing facilities, which we believe help us to maintain our presence on top-selling vehicles. We have more than 10 years of experience in integrating systems and modules.

"Own" the Product Life Cycle

We seek to leverage our aftermarket expertise, which provides us with valuable consumer demand information, to strengthen our competitive position with OEMs. Our market knowledge, coupled with our leading aftermarket presence, strengthens our ties with our OE customer base and drives OE acceptance of our aftermarket products and technologies for use in original vehicle manufacturing.

Commercialize Innovative, Value-Added Products

To differentiate our offerings from those of our competitors, we focus on commercializing innovative, value-added products, both on our own and through strategic alliances, with emphasis on highly engineered

systems and complex assemblies and modules. We seek to continually identify and target new, fast-growing niche markets and commercialize our new technologies for these markets, as well as our existing markets.

For example, in late 1998, we reached an agreement with Öhlins Racing A.B. to jointly develop advanced, electronically controlled suspension damping systems which decrease spring movement, and in 2001 Volvo selected a system designed pursuant to our agreement with Öhlins for use in Volvo's P202R model. In February 2002, we entered into an agreement with Vibracoustic GmbH & Co. to develop a pneumatic spring shock absorber (or "Luft Feder Dampfer") system for automotive vehicle and other applications.

Leverage Aftermarket Brand Names

We manufacture and market leading brand name products. Monroe® ride control products and Walker® emissions control products, which have been offered to consumers for over 50 years, are two of the most recognized brand name products in the automotive parts industry. We continue to emphasize product value differentiation with these brands and our other primary brands, including:

- The Monroe Reflex® shock absorber which features an Impact SensorTM device to maintain better tire-to-road contact and improve handling and safety under rough road conditions;
- The Monroe Sensa-Trac[®] line of shock absorbers, that has been enhanced by the SafeTecTM system technology which incorporates a fluon banded piston to improve performance and durability;
- Walker's Quiet-Flow® muffler, which features an open flow design that increases exhaust flow, improves sound quality and significantly reduces exhaust back pressure when compared to other replacement mufflers;
- Rancho® ride control products for the high-performance light truck market;
- DynoMax® high-performance emissions control systems;
- Walker PerfectionTM catalytic converters;
- Clevite[®] elastomeric vibration control components, which are primarily rubber products used to reduce vibration through "cushioning" a connection or contact point; and
- In European markets, WalkerTM and AluminoxTM mufflers.

We are capitalizing on our brand strength by incorporating newly acquired product lines within existing product families. We believe brand equity is a key asset in a time of customer consolidation and merging channels of distribution.

Achieve Greater Content per Vehicle

With increasingly stricter emissions regulations forecasted, we believe that available emissions control content per light vehicle for all parts suppliers will rise over the next several years as a result of the introduction of multiple catalytic converters per vehicle and heat exchangers. Further, we believe that consumers' greater emphasis on automotive safety could also allow available ride control content per light vehicle for all parts suppliers to rise over the next several years for luxury and performance vehicles featuring state-of-the-art ride control technologies, and that modular ride control assemblies also represent an opportunity to increase vehicle content. We plan to take advantage of these trends by leveraging our existing position on many top-selling vehicle platforms and by continuing to enhance our modular/systems capabilities.

Diversify End Markets

One of our goals is to apply our existing design, marketing and manufacturing capabilities to penetrate a variety of adjacent markets. We believe that our capabilities could be used for heavy-duty vehicle and industrial applications, various recreational vehicles, scooters and bicycles. We expect that expanding into

markets other than automotive parts will allow us to capitalize on our advanced technical and manufacturing infrastructure to achieve growth in higher-margin businesses.

Implement Advanced Management Initiatives: BOS, Six Sigma and EVA®

We have adopted Business Operating System (BOS) as a disciplined system to promote and manage continuous improvement. BOS focuses on the assembly and analysis of data for quick and effective problem resolution to create more efficient and profitable operations. We are also implementing Six SigmaTM, a methodology and approach designed to minimize product defects and improve operational efficiencies.

In late 1999, we engaged Stern Stewart & Co. to assist us in implementing Economic Value Added (EVA)¹, a financial tool that more effectively measures how well we employ our capital resources. We have linked the successful application of this management discipline to our incentive compensation program.

Maintain Operating Cost Leadership

In addition to implementing BOS, Six Sigma and EVA®, we intend to continue to reduce costs by:

- standardizing products and processes throughout our operations;
- further developing our global supply chain management capabilities;
- improving our information technology;
- · increasing efficiency through employee training;
- · investing in more efficient machinery; and
- enhancing the global coordination of costing and quoting procedures.

Beginning in the fourth quarter of 1998, we commenced a series of steps designed to reduce administrative and operational costs and improve cost management as follows:

- In the fourth quarter of 1998, we began an operational and administrative restructuring which resulted in the closing of two plant locations and five distribution centers, and the elimination of a total of approximately 752 positions. This restructuring was completed in mid-2000.
- In December 1999, we implemented a supplemental restructuring plan which involved: the closure in Europe of a ride control manufacturing facility and an exhaust just-in-time plant and the closure or downsizing of four aftermarket distribution centers; the closure in North America of an exhaust manufacturing facility; and the elimination of a total of approximately 780 positions worldwide. This restructuring was completed in 2002.
- In October 2000, we put in place an additional restructuring plan, which called for the consolidation of our North American aftermarket exhaust production at one plant and a salaried workforce reduction of 700 positions worldwide. This restructuring was completed in 2002. We have executed the plan more efficiently than initially anticipated and as a result have reversed \$2 million of the original charge to income in the fourth quarter of 2002.
- In December 2000, we realigned our North American original equipment business around its two
 major product areas—ride control and emissions control—and consolidated our program management resources to original equipment manufacturers under a single global team. We also realigned
 our Japanese original equipment business operations by integrating it with our former international
 vehicle and emerging market units into a single international group.

¹ EVA® is a registered trademark of Stern Stewart & Co.

- In January 2001, we undertook a separate initiative to eliminate an additional 405 salaried positions worldwide, 215 of which were taken immediately. This cost-reduction plan was completed in 2002. We executed the plan more efficiently than initially anticipated and as a result reversed \$1 million of the original charge to income in the fourth quarter of 2002.
- In December 2001, we began implementing Project Genesis, an initiative designed to optimize our global manufacturing, distribution and logistics footprint. Pursuant to the first phase of this initiative, we closed eight facilities, consolidated or rearranged 20 others to improve work flow and moved production assets among some of our plants. We also reduced our total workforce by 17 percent. We have executed the plan more efficiently than initially anticipated and as a result have reversed \$6 million of the original charge to income in the fourth quarter of 2002. We expect to complete the first phase of this initiative in the first half of 2003. Future phases of this initiative, which have not yet been finalized, will require approval by our Board of Directors and, depending upon the costs of the plans, could require approval by our senior lenders.

For additional information concerning our restructuring efforts, see Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Note 2 to the financial statements of Tenneco Automotive Inc. and Consolidated Subsidiaries included under Item 8.

Take Advantage of Opportunities Offered by the Internet

As part of our overall effort to reduce costs, increase efficiencies and improve customer service, we are seeking to take advantage of the opportunities offered by the Internet.

Our initiatives in this area include:

- In January 2000, we launched our TAsupplier.com website which provides our North American vendors with on-line access to our supplier and quality manuals. Multi-language versions of our supplier manuals were put on-line for our European and South American vendors in July 2000. In 2000, we also upgraded our South American website to allow our vendors to view forecasts, shipment releases and report cards online.
- In May 2000, we launched one of the industry's first on-line aftermarket customer order management systems www.ta-direct.com that allows customers to place and track orders 24 hours a day. The site streamlines purchasing by providing immediate order placement, pricing, stock and order status, and shipment tracking. We currently have over 800 customers registered to use the system, which generates almost 2,500 inquiries per month. During 2002, we extended ta-direct to ride control, enabling all of our North American aftermarket customers to place orders on line.
- In September 2000, we acquired a minority interest in TecCom GmbH, a German e-commerce company founded by a consortium of 20 automotive parts suppliers. TecCom was formed to provide an on-line aftermarket customer order management system for the European market. We currently have 117 customers connected through TecCom.
- In August 2001, we launched a website which permits engineers from our company and General Motors to view and update data required to create new elastomer products.

Execute Focused Transactions

In the past, we have been successful in identifying and capitalizing on strategic acquisitions and alliances to achieve growth. Through these acquisitions and alliances, we have: (1) expanded our product portfolio; (2) realized incremental business with existing customers; (3) gained access to new customers; and (4) achieved leadership positions within new geographic markets.

Where appropriate, we intend to continue to pursue strategic alliances and transactions that complement our existing technology and systems development efforts and/or enhance our global presence. This focused strategy should assist us in aligning with strong local partners to penetrate international

markets and with companies that have proven proprietary technology and recognized research capabilities necessary to help develop further leadership in systems integration.

Strategic Acquisitions and Alliances

Strategic acquisitions, joint ventures and alliances have been an important part of our growth. Through this strategy, we have expanded to meet customers' global requirements. This strategy has also allowed us to acquire or align with companies that possess proven technology and research capabilities, furthering, we believe, our leadership in systems integration.

Emissions Control

- In 1997, we acquired Autocan, a Mexican catalytic converter and exhaust pipe assembly manufacturer. We also acquired the manufacturing operations of MICHEL, a privately owned, Polish-based manufacturer of replacement market emissions control systems for passenger cars in Eastern Europe.
- In 1998, we established a joint venture in Shanghai, China to supply emissions control systems to the Central and Southern Chinese automotive markets. We also established a joint venture in Pune, India to supply emissions control systems to OE customers and the aftermarket.
- In 2000, we entered into a strategic alliance agreement with Futaba Industrial Co., Ltd., a leading Japanese emissions control manufacturer through which the companies are to jointly evaluate, bid on and obtain awards for OE supply of certain emissions control products and systems for use on "global platforms" requiring significant Japan-based engineering and/or manufacturing support. The goal of the alliance is to bring together our global manufacturing footprint and customer relationships with Futaba's expertise and customer relationships with Japanese OEMs. In connection with the alliance, the two companies also formed a joint venture to develop and produce emission control components and stamped products at our former manufacturing facility in Burnley, England.
- In July 2001, we formed a joint venture with Yarnapund Ltd., a Thai emissions control system manufacturer, to produce emissions control systems for the Isuzu I-190 vehicle platform to be assembled in Thailand by Isuzu Motors Co. (Thailand) Ltd.

Ride Control

- In 1997, we entered into a joint venture which resulted in our acquisition of majority ownership of Armstrong, a leading South African manufacturer of ride control products. In 2000, we increased our ownership interest in this joint venture to 74.9 percent.
- In early 1998, we entered into an agreement with Öhlins Racing AB, a Swedish ride control system manufacturer to jointly develop advanced, electronically controlled suspension dampening systems which decrease spring movement.
- In early 1999, we completed the acquisition of Kinetic Ltd., an Australian suspension engineering company with advanced roll control technology.
- In July 2001, we entered into a strategic alliance with Tokico Ltd., a leading Japanese ride control supplier, through which the companies are to jointly evaluate, bid on and obtain awards for OE supply of certain ride control products for use on "global" platforms requiring significant Japan-based engineering and/or manufacturing support. The goal of the alliance is to bring together our global manufacturing footprint and customer relationships with Tokico's expertise and customer relationships with Japanese OEs.
- In February 2002, we entered into a cooperation agreement with Vibracoustic GmbH & Co. KG, a German manufacturer of pneumatic spring and related systems, pursuant to which the companies

plan to work together to develop a pneumatic spring shock absorber or "Luft-Feder-Dampfer" system for automotive vehicle and other technical applications.

Other

As of December 31, 2002, we had approximately 20,000 employees, approximately 54 percent of which are covered by collective bargaining agreements and approximately 28 percent of which are governed by European works councils. Several of our existing labor agreements, including those covering plants in Spain, Belgium, France, the United Kingdom and the United States, are scheduled for renegotiation in 2003. We regard our employee relations as generally satisfactory.

The principal raw material utilized by us is steel. We obtain steel from a number of sources pursuant to various contractual and other arrangements. We believe that an adequate supply of steel can presently be obtained from a number of different domestic and foreign suppliers.

We hold a number of domestic and foreign patents and trademarks relating to our products and businesses. We manufacture and distribute our products primarily under the Walker® and Monroe® brand names, which are well-recognized in the marketplace and are registered trademarks. The patents, trademarks and other intellectual property owned by or licensed to us are important in the manufacturing, marketing and distribution of our products.

ENVIRONMENTAL MATTERS

We estimate that we and our subsidiaries will make capital expenditures for environmental matters of approximately \$3 million in 2003 and approximately \$2 million in 2004.

For additional information regarding environmental matters, see Item 3, "Legal Proceedings," Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," and Note 11 to the financial statements of Tenneco Automotive Inc. and Consolidated Subsidiaries included under Item 8.

ITEM 2. PROPERTIES.

We lease our principal executive offices, which are located at 500 North Field Drive, Lake Forest, Illinois, 60045.

Walker's consolidated businesses operate 9 manufacturing facilities in the U.S. and 27 manufacturing facilities outside of the U.S., operate 4 engineering and technical facilities worldwide and share 2 other such facilities with Monroe. Eleven of these manufacturing plants are JIT facilities. Walker operates four additional manufacturing facilities outside of the U.S. through four non-controlled joint ventures, 3 of which are JIT facilities.

Monroe's consolidated businesses operate 9 manufacturing facilities in the U.S. and 20 manufacturing facilities outside the U.S., operate 4 engineering and technical facilities worldwide and share 2 other such facilities with Walker. Five of these manufacturing plants are JIT facilities.

The above described manufacturing locations outside of the U.S. are located in Canada, Mexico, Belgium, Spain, the United Kingdom, the Czech Republic, South Africa, France, Sweden, Germany, Poland, Portugal, Argentina, Brazil, Australia, New Zealand, China, Thailand, and India. We also have sales offices located in Australia, Argentina, Brazil, Canada, India, Italy, Japan, Poland, Russia, Singapore, Thailand and Sweden.

We own approximately one half of the properties described above and lease the other half. We hold nine of the above-described international manufacturing facilities through eight joint ventures in which we own a controlling interest. In addition, we hold four others through four joint ventures in which we own a non-controlling interest. We also have distribution facilities at our manufacturing sites and at a few offsite locations, substantially all of which we lease.

We believe that substantially all of our plants and equipment are, in general, well maintained and in good operating condition. They are considered adequate for present needs and, as supplemented by planned construction, are expected to remain adequate for the near future.

We also believe that we have generally satisfactory title to the properties owned and used in our respective businesses.

ITEM 3. LEGAL PROCEEDINGS.

As of December 31, 2002, we are designated as a potentially responsible party in three Superfund sites. We have estimated our share of the remediation costs for these sites to be less than \$1 million in the aggregate. In addition to the Superfund sites, we may have the obligation to remediate current or former facilities, and we estimate our share of remediation costs at these facilities to be approximately \$14 million. For both the Superfund sites and the current and former facilities, we have established reserves that we believe are adequate for these costs. Although we believe our estimates of remediation costs are reasonable and are based on the latest available information, the cleanup costs are estimates and are subject to revision, as more information becomes available about the extent of remediation required. At some sites, we expect that other parties will contribute to the remediation costs. In addition, at the Superfund sites, the Comprehensive Environmental Response, Compensation and Liability Act provides that our liability could be joint and several, meaning that we could be required to pay in excess of our share of remediation costs. Our understanding of the financial strength of other potentially responsible

parties at the Superfund sites, and of other liable parties at our current and former facilities, has been considered, where appropriate, in our determination of our estimated liability.

We undertook a third-party evaluation of estimated environmental remediation costs at one of our facilities beginning in 2000. The evaluation was initiated as a result of testing that indicated the potential underground migration of some contaminants beyond our facility property. We completed and analyzed the results of our evaluation of contamination and migration from that facility. We initially increased the reserve by \$3 million in the fourth quarter of 2000 related to on-site remediation activities and \$5 million in the first quarter of 2001 following evaluation of needed off-site remediation activities. However, after further investigation of alternative remediation technologies, we were able to identify a more efficient technology and therefore reduced the reserve by \$4 million in the fourth quarter of 2001. There have been no significant changes in the reserve for 2002.

We believe that any potential costs associated with our current status as a potentially responsible party in the Superfund sites, or as a liable party at our current or former facilities, will not be material to our results of operations or consolidated financial position.

As previously discussed, from time to time we are subject to product warranty claims whereby we are required to bear costs of repair or replacement of certain of our products. Warranty claims may range from individual customer claims to full recalls of all products in the field. In the second quarter 2002, based on available facts and data at the time, we increased our warranty reserve in the amount of \$1 million for recently identified warranty issues. Based on our investigations and achievement of other commercial resolutions of these issues since that time, we presently believe that future costs or charges, if any, related to these issues will not be material to our consolidated financial position or results of operations.

We also from time to time are involved in legal proceedings or claims that are incidental to the conduct of our business. Some of these proceedings allege damages against us relating to environmental liabilities (including toxic tort, property damage and remediation), intellectual property matters (including patent, trademark and copyright infringement, and licensing disputes), personal injury claims (including injuries due to product failure, design or warnings issues, and other product liability related matters), employment matters, and commercial or contractual disputes, sometimes related to acquisitions or divestitures. We will continue to vigorously defend ourselves against all of these claims. Although the ultimate outcome of any legal matter cannot be predicted with certainty, based on present information, including our assessment of the merits of the particular claim, we do not expect that these legal proceedings or claims will have any material adverse impact on our future consolidated financial position or results of operations. In addition, we are subject to a number of lawsuits initiated by a significant number of claimants alleging health problems as a result of exposure to asbestos. Many of these cases involve significant numbers of individual claimants. However, only a small percentage of these claimants allege that they were automobile mechanics who were allegedly exposed to our former muffler products and a significant number appear to involve workers in other industries or otherwise do not include sufficient information to determine whether there is any basis for a claim against us. We believe, based on scientific and other evidence, it is unlikely that mechanics were exposed to asbestos by our former muffler products and that, in any event, they would not be at increased risk of asbestos-related disease based on their work with these products. Further, many of these cases involve numerous defendants, with the number of each in some cases exceeding 200 defendants from a variety of industries. Additionally, the plaintiffs either do not specify any, or specify the jurisdictional minimum, dollar amount for damages. On the other hand, we are experiencing an increasing number of these claims, likely due to bankruptcies of major asbestos manufacturers. We vigorously defend ourselves against these claims as part of our ordinary course of business. To date, with respect to claims that have proceeded sufficiently through the judicial process, we have regularly achieved favorable resolution in the form of a dismissal of the claim or a judgment in our favor. Accordingly, we presently believe that these asbestos-related claims will not have a material adverse impact on our future financial condition or results of operations.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.

No matters were submitted to the vote of security holders during the fourth quarter of 2002.

ITEM 4.1. EXECUTIVE OFFICERS OF THE REGISTRANT.

The following provides information concerning the persons who serve as our executive officers as of March 1, 2003. Each of these individuals, other than Kenneth Trammell, Hari Nair, Brent Bauer, Neal Yanos, and Paul Schultz were named as executive officers of our company effective November 4, 1999, the day of the 1999 Spin-off, at which time our then-existing executive officers resigned. Mr. Trammell was made an executive officer in December 1999. Mr. Yanos became an executive officer in December 2000, Mr. Nair was made an executive officer in January 2001, Mr. Bauer became an executive officer in July 2001, and Mr. Shultz became an executive officer in April 2002. Prior to becoming our executive officers, many of these individuals had served in our automotive operations. Accordingly, for periods prior to November 4, 1999, references to service to "us" or "our company" reflect services to Old Tenneco's automotive operations.

Name (and Age at December 31, 2002)	Offices Held
Mark P. Frissora (47)	Chairman, President and Chief Executive Officer
Timothy R. Donovan (47)	Executive Vice President, General Counsel and Managing Director — International
Hari N. Nair (42)	Executive Vice President and Managing Director — Europe
Mark A. McCollum (43)	Senior Vice President and Chief Financial Officer
Richard P. Schneider (55)	Senior Vice President — Global Administration
Timothy E. Jackson (46)	Senior Vice President — Global Technology
Paul Schultz (52)	Senior Vice President — Global Supply Chain Management
David G. Gabriel (44)	Senior Vice President and General Manager — North American Aftermarket
Brent Bauer (47)	Senior Vice President and General Manager — North American Original Equipment Emissions Control
Neal Yanos (41)	Vice President and General Manager — North American Original Equipment Ride Control
Kenneth R. Trammell (42)	Vice President and Controller

Mark P. Frissora — Mr. Frissora became our Chief Executive Officer in connection with the 1999 Spin-off and has been serving as President of the automotive operations since April 1999. In March 2000, he was also named our Chairman. From 1996 to April 1999, he held various positions within our automotive operations, including Senior Vice President and General Manager of the worldwide original equipment business. Mr. Frissora joined our company in 1996 from AeroquipVickers Corporation, where he served since 1991 as a Vice President. In the 15 years prior to joining AeroquipVickers, he spent 10 years with General Electric and 5 years with Philips Lighting Company in management roles focusing on product development and marketing. He is a member of The Business Roundtable and the World Economic Forum's Automotive Board of Governors. He is also a director of NCR Corporation.

Timothy R. Donovan — Mr. Donovan was named Managing Director of our International Group in May 2001 with responsibility for all operations in Asia and South America, as well as our Japanese OE business worldwide. He was named Senior Vice President and General Counsel of our company in August 1999. He was promoted to Executive Vice President in December 2001. Mr. Donovan also is in charge of our worldwide Environmental, Health and Safety Program. Mr. Donovan was a partner in the law firm of Jenner & Block from 1989 until his resignation in September 1999, and most recently served as the Chairman of Jenner & Block's Corporate and Securities Department and as a member of its Executive Committee. He is also a director of John B. Sanfilippo & Son, Inc. and is a member of its compensation committee and is the Chairman of its Audit Committee.

Hari N. Nair — Mr. Nair was named our Executive Vice President and Managing Director — Europe effective June 2001. Previously he was Senior Vice President and Managing Director — International. Prior to December 2000, Mr. Nair was the Vice President and Managing Director — Emerging Markets. Previously, Mr. Nair was the Managing Director for Tenneco Automotive Asia, based in Singapore and responsible for all operations and development projects in Asia. He began his career with Tenneco Inc. in 1987, holding various positions in strategic planning, marketing, business development, quality and finance. Prior to joining Tenneco, Mr. Nair was a senior financial analyst at General Motors Corp. focusing on European operations.

Mark A. McCollum — Mr. McCollum joined our automotive operations in April 1998. Prior to that he served as Tenneco Inc.'s Vice President, Corporate Development and was responsible for executing strategic transactions in both the automotive and packaging businesses. From January 1995 to April 1998, he served in various capacities for Tenneco Inc., including Vice President, Financial Analysis and Planning and Corporate Controller. Before that, Mr. McCollum spent 14 years with the international public accounting firm of Arthur Andersen LLP, serving as an audit and business advisory partner of the company's worldwide partnership from 1991 to December 1994. He is also a director of Butler Manufacturing Company.

Richard P. Schneider — Mr. Schnieder was named as our Senior Vice President — Global Administration in connection with the 1999 Spin-Off and is responsible for the development and implementation of human resources programs and policies and employee communications activities for our worldwide operations. Prior to the 1999 Spin-Off, Mr. Schneider served as our Vice President — Human Resources. He joined us in 1994 from International Paper Company where, during his 20 year tenure, he held key positions in labor relations, management development, personnel administration and equal employment opportunity.

Timothy E. Jackson — Mr. Jackson joined us as Senior Vice President and General Manager — North American Original Equipment and Worldwide Program Management in June 1999. He served in this position until August 2000, at which time he was named Senior Vice President — Global Technology. Mr. Jackson joined us from ITT Industries where he was President of that company's Fluid Handling Systems Division. With over 20 years of management experience, 14 within the automotive industry, he was also Chief Executive Officer for HiSAN, a joint venture between ITT Industries and Sanoh Industrial Company. Mr. Jackson has also served in senior management positions at BF Goodrich Aerospace and General Motors Corporation.

Paul Schultz — Mr. Schultz was named our Senior Vice President — Global Supply Chain Management in April 2002. Prior to joining the company, Mr. Schultz was the Vice President, Supply Chain Management at Ingersoll-Rand Company. Mr. Schultz joined Ingersoll-Rand in 1998 as Vice President, Strategic Sourcing for their joint venture company, Ingersoll Dresser Pump. He was later promoted to Vice President, Manufacturing Operations, where he successfully introduced and led the Six Sigma initiative. Prior to joining Ingersoll-Rand, Mr. Schultz was with AlliedSignal (now Honeywell International) where he served for 25 years in staff and management positions. Most recently, he was Corporate Director, Global Commodity Management.

David G. Gabriel — Mr. Gabriel was named our Senior Vice President and General Manager — North American Aftermarket in August 1999. From March to August 1999, Mr. Gabriel was the Vice President of Operations for our North American aftermarket business. From March 1997 to March 1999, he served as Vice President of Manufacturing for our North American aftermarket business. From February 1995 to March 1997, he served as Executive Director of Supplier Development for Tenneco Business Services. Before joining Tenneco Business Services in February 1995, Mr. Gabriel spent 15 years in various operating positions of increasing responsibility with the Pepsi Cola Company and Johnson & Johnson.

Brent Bauer — Mr. Bauer joined Tenneco Automotive in August 1996 as a Plant Manager and was named Vice President and General Manager — European Original Equipment Emission Control in September 1999. Mr. Bauer was named Vice President and General Manager — European and North

American Original Equipment Emission Control in July 2001. Currently, Mr. Bauer serves as the Vice President and General Manager — North American Original Equipment Emission Control. Prior to joining Tenneco, he was employed at AeroquipVickers Corporation for 10 years in positions of increasing responsibility serving most recently as Director of Operations.

Neal Yanos — Mr. Yanos was named our Vice President and General Manager — North American Original Equipment Ride Control in December 2000. He joined our Monroe ride control division as a process engineer in 1988 and since that time has served in a broad range of assignments including product engineering, strategic planning, business development, finance, program management and marketing, including most recently Director of our North American original equipment GM/VW business unit. Before joining our company, Mr. Yanos was employed in various engineering positions by Sheller Globe Inc. (now part of Lear Corporation) from 1985 to 1988.

Kemmeth R. Trammell — Mr. Trammell was named our Vice President and Controller in September 1999. From April 1997 to November 1999 he served as Corporate Controller of Tenneco Inc. He joined Tenneco Inc. in May 1996 as Assistant Controller. Before joining Tenneco Inc., Mr. Trammell spent 12 years with the international public accounting firm of Arthur Andersen LLP, last serving as a senior manager.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS.

Our outstanding shares of common stock, par value \$.01 per share, are listed on the New York, Chicago, Pacific and London Stock Exchanges. The following table sets forth, for the periods indicated, the high and low sales prices of our common stock on the New York Stock Exchange Composite Transactions Tape.

		Prices
Quarter	High	Low
2002		
1st	\$4.10	\$1.90
2nd	6.75	3.82
3rd	8.32	3.50
4th	5.97	3.28
2001		
1st	\$4.25	\$2.62
2nd	4.49	2.40
3rd	5.45	1.86
4th	2.30	1.35

As of March 11, 2003, there were approximately 54,776 holders of record of our common stock, including brokers and other nominees.

The declaration of dividends on our common stock is at the discretion of our Board of Directors. The Board has not adopted a dividend policy as such; subject to legal and contractual restrictions, its decisions regarding dividends are based on all considerations that in its business judgment are relevant at the time. These considerations may include past and projected earnings, cash flows, economic, business and securities market conditions and anticipated developments concerning our business and operations.

We are highly leveraged and restricted with respect to the payment of dividends under the terms of our financing arrangements. On January 10, 2001, we announced that our Board of Directors eliminated the regular quarterly dividend on the Company's common stock. The Board took this action in response to then-current industry conditions, primarily greater than anticipated production volume reductions by original equipment manufacturers in North America and continued softness in the global aftermarket. We have not paid dividends on our common stock since the fourth quarter of 2000. There are no current plans to reinstate a dividend on our common stock, as management intends to retain any earnings for use in our business for the forseeable future. For additional information concerning our payment of dividends, see Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations."

ITEM 6. SELECTED FINANCIAL DATA.

TENNECO AUTOMOTIVE INC. AND CONSOLIDATED SUBSIDIARIES SELECTED CONSOLIDATED FINANCIAL DATA

				Years	End	ed Decemb	er 3	1,		
	20	002(a)	2	001(a)	2	000(a)	1	999(a)	1	998(a)
	. –		Millio	ns Except	Sha	re and Per	Sha	re Amount	s) -	
Statements of Income Data: Net sales and operating revenues from continuing operations —		٠								
North America Europe Other Intergroup sales	\$	1,906 1,254 352 (53)	\$	1,799 1,305 318 (58)	\$	1,956 1,292 348 (68)	\$	1,749 1,273 297 (59)	\$	1,670 1,278 316 (45)
	\$	3,459	\$	3,364	\$	3,528	\$	3,260	\$	3,219
Income from continuing operations before interest expense, income taxes, and minority interest —	 -									
North AmericaEuropeOther	\$	129 18 22	\$	52 23 17	\$	68 40 12	\$	166 44 (62)	\$	58 155 14
Total Interest expense (net of interest capitalized) (b) Income tax expense Minority interest		169 141 (7) 4		92 170 51 1		120 - 186 (27) 2		148 106 82 23		227 69 13 29
Income (loss) from continuing operations Income (loss) from discontinued operations, net		31	-	(130)		(41)		(63)		116
of income tax(c)			e ^c			- (1)		(208) (18)		139
principles, net of income tax(e)	•	(218)		<u> </u>				(134)		
Net income (loss)	\$	(187)	\$	(130)	\$	(42)	\$	(423)	\$	255
Average number of shares of common stock outstanding Basic Diluted Earnings (loss) per average share of common stock — Basic:		795,481 667,815		779,837 001,248		735,766 906,825		,480,686 ,656,063		701,115 766,906
Continuing operations Discontinued operations(c) Extraordinary loss(d) Cumulative effect of changes in accounting	\$	0.78	\$	(3.43)	\$	(1.18) — (.02)	\$	(1.87) (6.23) (.55)	\$	3.45 4.13
principles(e)	\$	(5.48)	<u>·</u>	(3.43)	\$	(1.20)	\$	(3.99) (12.64)	\$	7.58
Diluted: Continuing operations Discontinued operations(c) Extraordinary loss(d) Cumulative effect of changes in accounting	\$	0.74	\$	(3.43)	\$	(1.18)	\$	(1.87) (6.23) (.55)	\$	3.44 4.12
principles(e)	_ _	(5.48) (4.74)	\$	(3.43)	\$	<u> </u>		(3.99)	\$	7.56
Cash dividends per common share	\$		\$		\$.20	\$	4.50	\$	6.00

	Years Ended December 31,									
	2002(a)		2001(a)			2000(a)		1999(a)	15	998(a)
	(Dollar a	moun	t in Millio		Except Shar Amounts)	e, I	Per Share, a	ınd F	Ratio
Balance Sheet Data:										
Net assets of discontinued operations(c)	\$	_	\$		\$	_	\$	_	\$	1,739
Total assets		2,504		2,681		2,886		2,943		4,759
Short-term debt(b)		228		191		92		56		304
Long-term debt(b)		1,217		1,324		1,435		1,578		671
Debt allocated to discontinued operations(b)		_		_				_		2,456
Minority interest		19		15		14		16		407
Shareholders' equity		(94)		74		330		422		2,504
Statement of Cash Flows Data:										
Net cash provided (used) by operating										
activities	\$	188	\$	141	\$	234	\$	(254)	\$	532
Net cash (used) by investing activities		(107)		(126)		(157)		(1,188)		(754)
Net cash provided (used) by financing activities		(73)		3		(123)		1,495		216
Cash flow(h)		253		209		281		169		124
Capital expenditures for continuing operations		138		127		146		154		195
Other Data:	1									
EBITDA(f)	\$	313	\$	245	\$	271	\$	292	\$	377
Ratio of earnings to fixed charges(g)		1.2		.6		.6		1.0		2.2

NOTE: Our financial statements for the three years ended December 31, 2002, which are discussed in the following notes, are included in this Form 10-K under Item 8.

- (a) For a discussion of the significant items affecting comparability of the financial information for the years ended 2002, 2001 and 2000, see Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations." We have reduced revenues for 2000, 1999 and 1998 by \$21 million, \$19 million, and \$18 million, respectively, to reflect the reclassification of certain sales incentives that were previously shown in selling, general and administrative expense. You should read Note 1 to the financial statements, appearing in Item 8, for further information about this required accounting change.
- (b) Debt amounts for 1998 and for 1999 through November 4, 1999 are net of allocations of corporate debt to the net assets of our discontinued specialty packaging and paperboard packaging segments. Interest expense for periods presented is net of interest expense allocated to income from discontinued operations. These allocations of debt and related interest expense are based on the ratio of our investment in the specialty packaging and paperboard packaging segments' respective net assets to our consolidated net assets plus debt.
- (c) Discontinued operations reflected in the above periods consist of our (1) specialty packaging segment, which was discontinued in August 1999 and (2) paperboard packaging segment, which was discontinued in June 1999.
- (d) Represents our costs related to prepayment of debt, the 1999 loss recognized in connection with the contribution of the containerboard assets to a new joint venture, and in 2000 the 1999 loss recognized in the spin-off of Tenneco Packaging Inc.
- (e) In 2002, we adopted Statement of Financial Accounting Standards No. 142 which changes the accounting for purchased goodwill from an amortization method to an impairment-only approach. In 1999, we implemented the American Institute of Certified Public Accountants Statement of Position 98-5, "Reporting on the Costs of Start-up Activities." In addition, effective January 1, 1999, we changed our method of accounting for customer acquisition costs from a deferred method to an expense-as-incurred method. You should also read the notes to the financial statements of Tenneco Automotive Inc. and Consolidated Subsidiaries, appearing in Item 8, for additional information.
- (f) EBITDA represents income before extraordinary item, cumulative effect of change in accounting principle, interest expense, income taxes, minority interest and depreciation and amortization. EBITDA is not a calculation based upon generally accepted accounting principles. The amounts included in the EBITDA calculation, however, are derived from amounts included in the historical statements of income data. In addition, EBITDA should not be considered as an alternative to net income or operating income as an indicator of our operating performance, or as an alternative to operating cash flows as a measure of liquidity. We have reported EBITDA because we regularly review EBITDA as a measure of our company's ability to incur and service debt. In addition, we believe our debt holders utilize and analyze our EBITDA for similar purposes. We also believe EBITDA assists investors in comparing a company's performance on a consistent basis without regard to depreciation and amortization, which can vary significantly depending upon many factors. However, the EBITDA measure presented in this

document may not always be comparable to similarly titled measures reported by other companies due to differences in the components of the calculation. EBITDA is derived from the statements of income as follows:

	Years Ended December 31,							
	2002	2001	2000 (Millions)	1999	1998			
Income before interest expense, income taxes, and minority interest	\$169	\$ 92 .	·	\$148	\$227			
Depreciation and amortization Total EBITDA	$\frac{144}{\$313}$	$\frac{153}{$245}$	$\frac{151}{$271}$	$\frac{144}{$292}$	$\frac{150}{$377}$			

- (g) For purposes of computing this ratio, earnings generally consist of income from continuing operations before income taxes and fixed charges excluding capitalized interest. Fixed charges consist of interest expense, the portion of rental expense considered representative of the interest factor and capitalized interest. For the years ended December 31, 2001 and 2000, earnings were insufficient by \$80 million and \$74 million, respectively, to cover fixed charges. See Exhibit 12 to this Form 10-K for the calculation of this ratio.
- (h) The amounts included in the cash flow calculation are the sum of cash provided before financing activities, cash paid during the year for interest, and cash paid during the year for taxes as shown in the historical statements of cash flow. We have reported cash flow because we regularly review cash flow as a measure of cash generated by our business to meet our debt and tax obligations. In addition, we believe our debt holders and others analyze our cash flow for similar purposes. We also believe that cash flow assists investors in understanding our ability to meet our obligations. Cash flow is derived from the statements of cash flows as follows:

•	Years Ended December 31,							
	2002	2001	2000	1999	1998			
			(Millions)					
Net cash provided (used) before financing activities	\$ 81	\$ 15	\$ 77	\$(228)	\$215			
Cash paid during the year for interest	145	177	186	260	259			
Cash paid during the year for taxes	<u>· 27</u>	17	18	137	80			
Cash Flow	\$253	\$209	\$281	\$ 169	\$124			

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

As you read the following review of our financial condition and results of operations, you should also read our financial statements and related notes beginning on page 55.

Background

Tenneco Automotive Inc. is one of the world's leading manufacturers of automotive emissions control and ride control products for both the original equipment ("OE") market and aftermarket. We completed the separation of our packaging business in a series of transactions during 1999, culminating in the spin-off to our shareholders of the common stock of Pactiv Corporation (formerly known as Tenneco Packaging Inc.) on November 4, 1999.

Years 2002 and 2001

Operating Units Results

Net Sales and Operating Revenues

	_2002	2001	% Change
	(Mill		
North America	\$1,898	\$1,790	6%
Europe	1,221	1,266	(4)
Rest of World	340	308	10
	\$3,459	\$3,364	3

Revenues from our North American operations increased \$108 million in 2002 compared to the same period last year. Higher sales from the original equipment business were partially offset by aftermarket volume softness in both product lines, primarily in the fourth quarter. Total North American OE revenues increased 10 percent to \$1,407 million in 2002 due to higher volumes and increased catalytic converter sales that are passed through to our customers. OE exhaust revenues were up 11 percent in 2002 primarily due to increased volumes and higher pass-through sales. These "pass-through" catalytic converter sales occur when, at the direction of our OE customers, we purchase catalytic converters or components from suppliers, use them in our manufacturing process, and sell them as part of the completed system. OE ride control revenues for 2002 increased 10 percent, driven by increased volumes in both the light vehicle and heavy-duty market. Total OE revenues, excluding \$323 million of pass-through sales, increased 8 percent in 2002, while North American light vehicle production increased approximately 6 percent over 2001. Our revenue increase was greater than the build rate increase as a result of the introduction of new platforms, on which we are a supplier, ramping up and outpacing the overall build rate. Aftermarket revenues for North America were \$491 million for 2002, representing a decrease of 5 percent compared to the prior year. Aftermarket ride control revenues increased one percent in 2002, as a result of new customer additions in the second half of 2001 and the first quarter of 2002 offsetting overall softness in the ride control aftermarket, particularly in the second half of 2002. Aftermarket exhaust revenues declined 14 percent in 2002 reflecting an overall market decline in the exhaust business. Partially offsetting the volume decreases were price increases in both product lines and a shift toward premium products which positively impacted revenues by \$8 million in 2002.

Our European segment's revenues decreased \$45 million or 4 percent in 2002 compared to the prior year. Total OE revenues were \$910 million for 2002. OE exhaust revenues declined 8 percent to \$723 million from \$786 million the prior year. Excluding a \$59 million decrease in pass-through sales and a \$39 million net increase due to strengthening currency, OE exhaust revenues declined 8 percent. OE ride control revenues increased to \$187 million or 6 percent, from \$176 million for 2002. Excluding a \$12 million net benefit from currency appreciation, OE ride control revenues declined one percent. Light vehicle production by European OE manufacturers was down about 2 percent in 2002 versus 2001. Our

OE exhaust decline was greater than the decline in the European light vehicle build rate primarily due to timing issues experienced in the second and third quarters of 2002 between retiring platforms and the launch of new platforms on which we are the supplier. Nearly all of the platforms planned for launch during this period have commenced production and most are now at or near expected volumes. Our OE ride control revenue decline was less than the decline in the European light vehicle build rate as a result of stronger sales on our existing platforms. European aftermarket sales were \$311 million in 2002 compared to \$304 million in the prior year. Excluding \$18 million attributable to currency appreciation, aftermarket revenues declined 4 percent due primarily to the continued decline in exhaust replacement rates as a result of the increasing use of stainless steel new vehicles. This decline was partially offset by the launch of Monroe Reflex® shocks and struts, our premium ride control product, in the second quarter of 2002.

Revenues from our operations in the rest of the world increased \$32 million to \$340 million in 2002 as compared to \$308 million in the prior year. Higher volumes and increased pass-through sales drove increased revenues of \$45 million at our Asian operations. Stronger volumes and strengthening currency also increased Australian revenues by \$19 million. These increases were partially offset by the effects of the weakened South American economy, where revenues declined by \$29 million.

Income Before Interest Expense, Income Taxes, and Minority Interest ("EBIT")

	Year I Decemb		
	2002	2001	Change
	(Mill	ions)	
North America	\$129	\$52	\$77
Europe	18	23	(5)
Rest of World	22	<u>17</u>	5
	<u>\$169</u>	<u>\$92</u>	<u>\$77</u>

The EBIT results shown in the preceding table include the following items, discussed below, which have an effect on the comparability of EBIT results between periods:

	Year I Decemb	
	2002	2001
	(Mill	ions)
North America		
Restructuring charges (reversals)	\$(2)	\$20
Non-accruable restructuring-related expenses	5	6
Amendment of senior credit facility		_
Environmental reserve		. 1
Europe	•	
Restructuring charges (reversals)	(6)	22
Non-accruable restructuring-related expenses	6	
Amendment of senior credit facility	1	1
Environmental reserve	_	1
Gain on sale of York, U.K. facility	(11)	
Rest of World		
Restructuring charges (reversals)	(1)	3
Amendment of senior credit facility	· —	1

EBIT for North American operations increased to \$129 million in 2002 from \$52 million one year ago as higher sales volumes in our OE segment improved our earnings for the year. Stronger volumes and volume-related manufacturing efficiencies contributed \$37 million to OE profitability. The elimination of

goodwill amortization, discussed later in this Management's Discussion and Analysis under the section "Changes in Accounting Principles," contributed \$12 million to the EBIT increase. Partially offsetting these increases were increased selling, general and administrative costs, \$3 million in restructuring-related expenses that could not be accrued related to our Project Genesis restructuring efforts (net of a \$2 million favorable adjustment to the reserve for the costs to complete the first phase of Project Genesis) and \$1 million in costs associated with amending our senior credit facility. In the North American aftermarket, price increases instituted in 2002 and a shift toward premium products increased EBIT by \$8 million and lower changeover costs and manufacturing efficiencies and distribution increased EBIT by \$6 million. Partially offsetting these increases were lower volumes in the aftermarket emission control product line which reduced EBIT by \$9 million. Included in North America's prior year results were charges related to our 2001 restructuring efforts and the establishment of an environmental reserve that reduced EBIT by \$27 million in the aggregate.

Our European segment's EBIT declined to \$18 million in 2002 from \$23 million the previous year. Volume decreases and related operating inefficiencies in both the OE and aftermarket operations negatively impacted EBIT by \$36 million. In the current year, we also incurred approximately \$6 million in restructuring-related expenses that could not be accrued related to our Project Genesis restructuring efforts and \$1 million in costs associated with amending our senior credit facility. European EBIT in 2002 was also reduced by \$1 million due to an increase in reserves for warranty issues. See "Environmental and Other Matters" later in this Management's Discussion and Analysis for a more detailed discussion of these warranty issues. Partially offsetting these decreases was the gain on the sale of our York, U.K. facility, which increased EBIT by \$11 million. A favorable adjustment in the reserve for our costs to complete our restructuring efforts also increased EBIT by \$6 million. Additionally, the elimination of goodwill amortization and lower selling, general and administrative overhead costs offset some of the decrease. Included in Europe's prior year results were charges related to our 2001 restructuring efforts, the establishment of an environmental reserve and costs associated with amending our senior credit facility that reduced EBIT by \$24 million in the aggregate.

EBIT for our operations in the rest of the world increased by \$5 million in 2002 compared to the previous year. Stronger volumes in Asia and Australia were offset by manufacturing inefficiencies and a weakened South American economy. Included in our 2002 results was a favorable adjustment in the reserve for our costs to complete the first phase of Project Genesis, which increased EBIT by \$1 million. Included in the rest of the world's prior year's results were charges related to our restructuring efforts and costs associated with amending our senior credit facility that reduced EBIT by \$4 million, in the aggregate.

EBIT as a Percentage of Revenue

	Year Ended December 31,	
	2002	2001
North America	7%	3%
Europe	1%	2%
Rest of World	6%	6%
Total Tenneco Automotive	5%	3%

In North America, EBIT as a percentage of revenue increased by 4 percent for 2002. Stronger OE volumes drove the increase. Additionally, volume-related manufacturing efficiencies and the elimination of goodwill amortization contributed to the increase. North American EBIT margins in 2001, on the other hand, were significantly impacted by our restructuring activities. In Europe, EBIT margins declined in 2002 due to significant decreases in both OE and aftermarket volumes. Also contributing to the decline were volume-related manufacturing inefficiencies. Partially offsetting these decreases was the gain on the sale of our York, U.K. facility. EBIT as a percentage of revenue for the rest of the world remained flat year over year as improved operating performance was offset by manufacturing inefficiencies and a weakened South American economy.

Restructuring and Other Charges

Over the past several years we have adopted plans to restructure portions of our operations. These plans were approved by the Board of Directors and were designed to reduce operational and administrative overhead costs throughout the business. Prior to the change in accounting required for exit or disposal activities described under "Changes in Accounting Principles" below, we recorded charges to income related to these plans for costs that do not benefit future activities in the period in which the plans were finalized and approved, while actions necessary to affect these restructuring plans occurred over future periods in accordance with established plans. We are conducting all workforce reductions in compliance with all legal and contractual requirements including obligations to consult with worker's councils, union representatives and others.

In the fourth quarter of 2000, our Board of Directors approved a restructuring plan to reduce administrative and operational overhead costs. We recorded, in the fourth quarter of 2000, a pre-tax charge related to the plan of \$46 million, \$32 million after tax, or \$.92 per diluted common share. Within the statement of income, \$13 million of the pre-tax charge is reflected in cost of sales, while \$33 million is included in selling, general and administrative expenses. The charge is comprised of \$24 million of severance and related costs for salaried employment reductions worldwide and \$22 million for the reduction of manufacturing and distribution capacity in response to long-term market trends. The 2000 plan involved closing a North American aftermarket exhaust distribution facility and a ride control manufacturing plant in our Asian market, as well as the consolidation of some exhaust manufacturing facilities in Europe. In addition, the plan involved the elimination of 700 positions, including temporary employees. We wrote down the assets at the locations to be closed to their estimated fair value, less costs to sell. We estimated the market value of buildings using external real estate appraisals. As a result of the single purpose nature of the machinery and equipment to be disposed of, fair value was estimated to be scrap value less costs to dispose in most cases. We do not expect that cash proceeds on the sale of these assets will be significant. As of December 31, 2002, 637 employees have been terminated under the 2000 plan primarily in North America and Europe. Additionally, 57 temporary employees have been terminated. All restructuring actions related to this plan have been completed. We executed the plan more efficiently than initially anticipated and as a result in the fourth quarter of 2002 we reversed \$2 million of the charge to the statement of income, of which \$1 million is recorded in cost of sales and \$1 million is recorded in selling, general and administrative expenses.

Also in the fourth quarter of 2000, we recorded other charges of \$15 million, \$10 million after tax, or \$.29 per diluted common share. These charges related to a strategic decision to reduce some of the aftermarket parts we offer and to relocation expenses incurred associated with the restructuring plans. The aftermarket parts were written down to their estimated scrap value less costs to sell.

In the first quarter of 2001, our Board of Directors approved a restructuring plan in response to increasingly difficult industry conditions. On January 31, 2001, we announced plans to eliminate 405 salaried positions worldwide. We recorded pre-tax charges related to this restructuring of \$11 million, \$8 million after tax, or \$.21 per diluted common share. Within the statement of income, \$2 million of the pre-tax charge is reflected in cost of sales, while \$9 million is included in selling, general and administrative expenses. These charges are comprised of \$8 million for severance and related costs for salaried employment reductions worldwide and \$3 million for costs related to closing a testing facility in North America. As of December 31, 2002, we have eliminated 329 positions in connection with the first quarter 2001 plan. We have completed all restructuring activities related to this plan. We executed the plan more efficiently than initially anticipated and as a result in the fourth quarter of 2002 reversed \$1 million in reserves related to this restructuring activity. All of the reversal was recorded in selling, general and administrative expenses.

In the second quarter of 2001, our Board of Directors approved a separate restructuring plan related to closing a North American ride control production line. We recorded pre-tax charges related to the plan of \$8 million, \$6 million after tax, or \$.16 per diluted common share. Within the statement of income, the \$8 million charge is included in cost of sales. We wrote down the assets to their fair market value, less

costs to sell. As a result of the single purpose nature of the machinery and equipment to be disposed of, fair value was estimated to be scrap value less costs to dispose. Cash proceeds from the sale of these assets were not significant. All restructuring activities related to this plan have been completed.

In the fourth quarter of 2001, our Board of Directors approved a restructuring plan, the first phase of a project known as Project Genesis, designed to lower our fixed costs, improve efficiency and utilization, and better optimize our global footprint. The first phase of Project Genesis involved closing eight facilities, improving the process flow and efficiency through value mapping and plant arrangement at 20 facilities, relocating production among facilities, and centralizing some functional areas. The closed facilities include an emissions control aftermarket plant and an aftermarket distribution operation in Europe, a ride control plant in Europe, an engineering center in Europe, one building at an emissions control plant complex in North America, a technology facility in North America, an exhaust manufacturing facility in North America, and our London-based treasury office. In the fourth quarter of 2001, we recorded pre-tax charges related to Project Genesis of \$27 million. Within the statement of income, \$23 million of the pre-tax charge is reflected in cost of sales, while \$4 million is included in selling, general and administrative expenses. These charges are comprised of \$18 million in severance and \$9 million for equipment lease cancellation, asset impairment and other restructuring costs to close the eight facilities. We wrote down the assets at locations to be closed to their estimated fair value, less costs to sell. We estimated the market value of buildings using external real estate appraisals. As a result of the single purpose nature of the machinery and equipment to be disposed of, fair value was estimated to be scrap value less costs to dispose in most cases. We also recorded a pre-tax charge of \$4 million in cost of sales related to a strategic decision to adjust some product offerings and our customer supply strategy in the European aftermarket. The aftermarket parts were written down to their estimated scrap value, less costs to sell. Finally, we also incurred \$1 million in other restructuring related costs during the fourth quarter for the value mapping and rearrangement of one of our emissions control plants in North America. Since these costs relate to ongoing operations, they could not be accrued as part of the restructuring charge. The total of all these restructuring and other costs recorded in the fourth quarter of 2001 was \$32 million before tax, \$31 million after tax, or \$.81 per diluted common share. As of December 31, 2002, we have eliminated 945 positions in connection with the first phase of Project Genesis. Additionally, we are executing this plan more efficiently than originally anticipated and as a result in the fourth quarter of 2002 reduced our reserves related to this restructuring activity by \$6 million which is recorded in cost of sales. We expect to complete all remaining restructuring activities related to the first phase of Project Genesis in the first half of 2003.

In addition to the fourth quarter 2001 charges, we incurred other costs during 2002 of \$11 million for moving and rearrangement activities related to Project Genesis that could not be accrued as part of the restructuring charge.

During 2002 we generated about \$12 million of savings from Project Genesis. About \$2 million of savings was related to closing the eight facilities, about \$6 million of savings was related to value mapping and plant arrangement and about \$4 million of savings was related to relocating production among facilities and centralizing some functional areas. To date, there have been no significant deviations from planned savings. When complete, we expect that the series of restructuring actions initiated in the fourth quarter of 2001 will generate annualized savings of \$30 million. About \$7 million of the expected savings should be generated by closing the eight facilities, about \$13 million of the expected savings should be generated by improving process flow and efficiency through value mapping and plant arrangement and about \$10 million of the expected savings will be generated by relocating production among facilities and centralizing some functional areas.

Amounts related to activities that are part of all the restructuring plans discussed above are as follows:

	December 31, 2001 Restructuring Reserve	2002 Cash Payments	Charged to Asset Accounts	Impact of Exchange Rates	Reserve Adjustments	December 31, 2002 Restructuring Reserve
	-		(Mi	llions)		· · · · · · · · · · · · · · · · · · ·
Severance	\$23	\$(10)	\$ —	\$ 2	\$(6)	\$ 9
Asset Impairment	4	·—	(4)	-	_	
Other	<u>_6</u>	(5)	2	_=	<u>(3</u>)	
	<u>\$33</u>	<u>\$(15</u>)	<u>\$(2</u>)	\$ 2	<u>\$(9)</u>	\$ 9

In the second quarter of 2002, we sold a manufacturing facility in the U.K. that we closed in an earlier restructuring plan. Included in Charged to Asset Accounts in the preceding table is an adjustment to the assumptions made in the recording of the U.K. facility's restructuring reserve. The proceeds of \$17 million exceeded our original estimates of the market value of the property. Consequently, after the adjustment, we recorded a pre-tax gain of \$11 million on the sale in the second quarter of 2002. This gain is shown in the statement of income as a gain on sale of assets.

Under the terms of an amendment to our senior credit agreement that took effect on March 13, 2002, we are allowed to exclude up to \$60 million of cash charges and expenses, before taxes, related to potential future cost reduction initiatives over the 2002-2004 period from the calculation of the financial covenant ratios we are required to maintain under our senior credit agreement. In addition to the announced actions, we continue to evaluate additional opportunities, including additional phases of Project Genesis, to initiate actions that will reduce our costs through implementing the most appropriate and efficient logistics, distribution, and manufacturing footprint for the future. There can be no assurances however, that we will undertake additional phases of Project Genesis or other additional restructuring actions. Actions that we take, if any, will require the approval of our Board of Directors and, if the costs of the plans exceed the amount previously approved by our senior lenders, could require approval by our senior lenders. We plan to conduct any workforce reductions that result in compliance with all legal and contractual requirements including obligations to consult with workers' councils, union representatives and others.

Interest Expense, Net of Interest Capitalized

We reported interest expense of \$141 million in 2002, compared to \$170 million in the prior year. The decrease in total interest expense is due to lower interest rates on our variable rate debt and overall lower debt balances. Capitalized interest was \$4 million in 2002 and \$3 million in 2001. See "Liquidity and Capital Resources — Capitalization" later in this Management's Discussion and Analysis for a more detailed description of our borrowings.

Included in our current interest expense is the financial impact of the three-year floating-to-fixed rate swaps we put in place in early 2000 on \$300 million of our senior term loans, as required by our senior credit agreement. Based on then-current short-term interest rates, these swaps added approximately \$16 million to our interest expense for 2002. These swaps expired on February 4, 2003.

Income Taxes

We recorded a tax benefit of \$7 million in 2002. The current year benefit included a \$4 million tax benefit related to lower-than-expected costs for withholding taxes related to our foreign operations. The lower cost of tax withholding for the first half of 2002 tax repatriation transaction resulted from an amendment to our bank agreement allowing a more tax efficient transaction to be completed. We also recorded an \$11 million benefit in the current year related to accrual-to-return adjustments in foreign jurisdictions and a \$4 million benefit related to a decrease in the corporate tax rate in Belgium from 40 percent to 34 percent. Including all these items, the effective tax rate was a negative 24 percent for 2002. Excluding these items our effective tax rate was 40 percent for 2002.

We recorded tax expense in 2001 of \$51 million. Tax expense for 2001 included a \$66 million expense for repatriation of earnings from some of our foreign subsidiaries. We took this action to better facilitate movement of cash balances among our overseas subsidiaries while minimizing cash tax payments in foreign

jurisdictions. Including this item, our effective tax rate was an expense of 67 percent for 2001. Excluding this adjustment our effective tax rate was a 19 percent benefit on our pre-tax loss. The primary reason that this differed from our statutory tax rate of 35 percent was the non-deductible portion of our restructuring charges. See Note 6 to the consolidated financial statements included in Item 8 for a reconciliation of our tax expense to the statutory rate.

Earnings Per Share

We reported earnings per diluted common share (before extraordinary items and cumulative effect of change in accounting principle) of \$.74 for the year ended December 31, 2002, compared to a loss of \$3.43 for the same period in 2001. Included in 2002 results are the negative impacts from expenses related to our restructuring plans and the costs related to the amendment of certain terms of the senior credit facility, offset by the gain on the sale of our York, U.K. facility, tax benefits related to lower-than-expected costs for withholding taxes and an accrual-to-return adjustment in a foreign jurisdiction and favorable adjustments to our reserves for restructuring activities. The net impact of these items improved earnings per diluted common share by \$.53. In addition, in 2002 we recorded the cumulative effect of a change in accounting principle of \$5.48 per diluted share to record the impact of the new accounting standard for goodwill. See "Changes in Accounting Principles" below for more information about this charge. Included in results for 2001 are the impacts from charges and expenses related to our restructuring plans, the tax charge for repatriation of foreign earnings, environmental remediation activities and the costs related to the amendment of certain terms of the senior credit facility. These items reduced earnings per diluted common share by \$2.95. You should also read Note 6 to the financial statements included in Item 8 for more detailed information on earnings per share.

Critical Accounting Policies

We prepare our financial statements in accordance with accounting principles generally accepted in the United States of America. Preparing our financial statements in accordance with generally accepted accounting principles requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. The following paragraphs include a discussion of some critical areas where estimates are required.

We recognize revenue for sales to our original equipment and aftermarket customers under the terms of our arrangements with those customers, generally at the time of shipment from our plants or distribution centers. For our aftermarket customers, we provide for promotional incentives and returns at the time of sale. Estimates are based upon the terms of the incentives and historical experience with returns. Where we have offered product warranty, we also provide for warranty costs. Those estimates are based upon historical experience and upon specific warranty issues as they arise. While we have not experienced any material differences between these estimates and our actual costs, it is reasonably possible that future warranty issues could arise that could have a significant impact on our financial statements.

We expense pre-production design and development costs incurred for our original equipment customers unless we have a contractual guarantee for reimbursement of those costs from the customer. At December 31, 2002, we had \$8 million recorded as a long-term receivable from original equipment customers for guaranteed pre-production design and development arrangements. While we believe that the vehicle programs behind these arrangements will enter production, these arrangements allow us to recover our pre-production design and development costs in the event that the programs are cancelled or do not reach expected production levels. We have not experienced any material losses on arrangements where we have a contractual guarantee of reimbursement from our customers.

We have a U.S. Federal tax net operating loss ("NOL") carryforward at December 31, 2002, of \$488 million, which will expire in varying amounts from 2012 to 2022. The federal tax effect of that NOL is \$171 million, and is recorded as an asset on our balance sheet at December 31, 2002. We estimate, based on available evidence, that it is more likely than not that we will utilize the NOL within the prescribed carryforward period. That estimate is based upon our expectations regarding future taxable

income of our U.S. operations and upon strategies available to accelerate usage of the NOL. Circumstances that could change that estimate include future U.S. earnings at lower than expected levels or a majority ownership change as defined in the rules of the U.S. tax law. If that estimate changed, we would be required to cease recognizing an income tax benefit for any new NOL and could be required to record a reserve for some or all of the asset currently recorded on our balance sheet. As of December 31, 2002, we believe that there has been a significant change in our ownership, but not a majority change, since the 1999 spin-off of Pactiv.

We utilize the intrinsic value method to account for our stock-based compensation plans in accordance with Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees." If our compensation costs for our stock-based compensation plans were determined using the fair value method of accounting as provided in Statement of Financial Accounting Standards ("SFAS") No. 123, "Accounting for Stock-Based Compensation," we estimate that our pro-forma net income and earnings per share for the full year 2002 would be lower by \$2 million or \$.04 per diluted share.

Changes in Accounting Principles

In July 2001, the Financial Accounting Standards Board ("FASB") issued SFAS No. 141, "Business Combinations," and SFAS No. 142, "Goodwill and Other Intangible Assets." SFAS No. 141 requires that the purchase method of accounting be used for all business combinations initiated after June 30, 2001. SFAS No. 142 changes the accounting for purchased goodwill from an amortization method to an impairment-only approach. Therefore amortization of all purchased goodwill, including amortization of goodwill recorded in past business combinations, ceased upon adoption of SFAS No. 142 in January 2002. Goodwill was amortized at the rate of \$16 million in 2001 and \$17 million in 2000, prior to adopting the new standard. Under the provisions of SFAS No. 142, we were required to perform an impairment analysis on the balance of goodwill at January 1, 2002. The fair value of our reporting units used in determining the goodwill impairment was computed using the present value of expected future cash flows. As a result of this analysis, we determined that goodwill associated with our North American ride control and European aftermarket operations was impaired. As a result, a charge of \$218 million, net of taxes of \$6 million, was recorded in the first quarter of 2002 as a cumulative effect of a change in accounting principle. The balance of unamortized goodwill was \$185 million at December 31, 2002. We are required to test this balance for impairment on an annual basis.

In June 2001, the FASB issued SFAS No. 143, "Accounting for Asset Retirement Obligations." SFAS No. 143 requires that the fair value of a liability for an asset retirement obligation be recognized in the period in which it is incurred if a reasonable estimate of fair value can be made. The associated asset retirement costs are capitalized as part of the carrying amount of the long-lived asset. SFAS No. 143 is effective for fiscal years beginning after June 15, 2002. We will be required to adopt the new standard by January 1, 2003. We do not believe that the effect of adopting this statement will have a material impact on our financial position or results of operations.

In August 2001, the FASB issued SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets." SFAS No. 144 addresses recognition, presentation and disclosure of impairment or disposal of long-lived assets. SFAS No. 144 supersedes SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Assets to be Disposed of," and Accounting Principles Board Opinion No. 30, "Reporting the Results of Operations — Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual, and Infrequently Occurring Events and Transactions, for the Disposal of a Segment of a Business." SFAS No. 144 was effective for fiscal years beginning after December 15, 2001, and interim periods within those fiscal years. The adoption of SFAS No. 144 did not have a material impact on our financial position or results of operations.

In June 2002, the FASB issued SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities." SFAS No. 146 changes the definition of the date at which a liability exists for exit or disposal activities also referred to as restructuring activities. Previously, we recognized a liability for restructuring activities when we committed to a plan of restructuring and announced this plan to the

employees. We will be required to apply the new standard prospectively to new exit or disposal activities initiated after December 31, 2002. The new statement will generally require that these costs be recognized at a later date and over time, rather than in a single charge.

In November 2002, the FASB issued Interpretation No. 45 "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others" ("FIN 45"), which expands previously issued accounting guidance and disclosure requirements for certain guarantees. FIN 45 provides that issuing a guarantee imposes a noncontingent obligation to stand ready to perform in the event that the conditions specified in the guarantee occur, and that a liability representing the fair value of such a guarantee must be recognized when the guarantee is issued. We will be required to apply these initial recognition and measurement provisions to guarantees issued or modified after December 31, 2002. We do not expect the adoption of FIN 45 to have a material impact on our financial position or results of operations.

In December 2002, the FASB issued SFAS No. 148 "Accounting for Stock-Based Compensation — Transition and Disclosure — an amendment of FASB Statement No. 123." SFAS No. 148 provides alternative methods of transition for a voluntary change to the fair value method of accounting for stock-based employee compensation and amends the disclosure requirements to require prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method used on reported results. See "Stock Options" included in Note 1 to our consolidated financial statements included in Item 8 for our compliance with the new transition and disclosure requirements of SFAS No. 148.

In January 2003, the FASB issued Interpretation No. 46, "Consolidation of Variable Interest Entities" ("FIN 46"). FIN 46 requires that the assets, liabilities and results of the activity of variable interest entities be consolidated into the financial statements of the entity that has the controlling financial interest. FIN 46 also provides the framework for determining whether a variable interest entity should be consolidated based on voting interest or significant financial support provided to it. This interpretation is effective immediately for variable interest entities created after January 31, 2003 and effective July 1, 2003 for variable interest entities created before February 1, 2003. We do not expect the adoption of FIN 46 to have any impact on our consolidated financial statements.

Liquidity and Capital Resources

Capitalization

	Year Ended December 31,		
	2002	2001	% Change
	(Mill		
Short term debt and current maturities	\$ 228	\$ 191	19%
Long term debt	1,217	1,324	(8)
Total debt	1,445	1,515	(5)
Total minority interest	19	15	27
Common shareholders' equity		74	(227)
Total capitalization	\$1,370	\$1,604	(15)

The year-to-date decrease in shareholders' equity primarily results from our recorded net loss of \$187 million, which resulted from the charge of \$218 million related to the cumulative effect of a change in accounting principle for goodwill. Stockholders' equity also decreased due to an adjustment to the additional minimum pension liability of \$38 million as a result of a decrease in the fair value of the plan assets. These declines were partially offset by a \$13 million increase in the fair market value of our interest rate swaps and \$43 million related to the translation of foreign balances into U.S. dollars. Although our book equity balance was negative at December 31, 2002, it should not affect our business operations. We have no debt covenant ratios that are based upon our book equity and there are no other agreements that are adversely impacted by our negative book equity.

Short-term debt, which includes the current portion of long-term obligations and borrowings by foreign subsidiaries, as well as our revolving credit facility, increased by \$37 million during 2002. This increase resulted from an increase in borrowings of \$53 million during 2002 under our revolving credit facility. A \$5 million decrease in our foreign subsidiaries' borrowings and a \$10 million decrease in the current portion of long-term debt partially offset this increase. The borrowings outstanding under our revolving credit facility as of December 31, 2002 were \$121 million and were \$68 million as of December 31, 2001. The decline in long-term debt represents amounts due during 2003. We did not issue any long-term debt during 2002.

Our financing arrangements are primarily provided by a committed senior secured financing arrangement with a syndicate of banks and other financial institutions, which was \$1.239 billion at December 31, 2002. We entered into an agreement to amend this facility on October 20, 2000 to (i) relax the financial covenant ratios beginning in the fourth quarter of 2000, (ii) exclude up to \$80 million of cash charges and expenses related to cost reduction initiatives from the calculation of consolidated earnings before interest, taxes, depreciation and amortization ("EBITDA") used in our financial covenant ratios through 2001 and (iii) make certain other technical changes. In exchange for these amendments, we agreed to certain interest rate increases, lowered our capital expenditure limits and paid an aggregate fee of about \$3 million.

As a result of significant reductions in North American vehicle production levels announced in 2000 by our original equipment customers, as well as an accelerated weakening of the global aftermarket, we entered into a second amendment of our senior credit facility on March 22, 2001. The second amendment revised the financial covenant ratios we were required to maintain as of the end of each of the quarters ending in 2001. The second amendment also reduced the limitation on 2001 capital expenditures from \$225 million to \$150 million, and required that net cash proceeds from all significant, non-ordinary course asset sales be used to prepay the senior term loans. In exchange for these amendments, we agreed to a 25 basis point increase in interest rates on the senior term loans and borrowings under our revolving credit facility and paid an aggregate fee of \$3 million to consenting lenders. We incurred legal, advisory and other costs related to the amendment process of \$2 million.

At the time of the second amendment, we expected that we would meet with the senior lenders during the first quarter of 2002 to negotiate further amendments to the senior credit facility. Consequently, we amended the senior credit facility for a third time on March 13, 2002. The third amendment revised the financial covenant ratios we are required to maintain as of the end of each of the quarters ending in 2002, 2003 and 2004. It also extends the limitation on annual capital expenditures of \$150 million through this three-year period. The amendment further provides us with the option to enter into sale and leaseback arrangements on up to \$200 million of our assets. The proceeds from these arrangements must be used to reduce senior debt. These senior debt prepayments would reduce the next scheduled principal amortization payments. Because the payments on senior debt from sale and leaseback transactions would be made on a pro-rata basis based on the remaining principal amounts outstanding on our Tranche A, B, and C senior term loans, but principal amortization payments are not pro-rata, about 29 percent of any sale and leaseback transactions we enter into during 2003 would reduce our scheduled principal amortization. The amendment also allows us to exclude up to \$60 million of cash charges and expenses, before taxes, related to any cost reduction initiatives over the 2002-2004 period from the calculation of the financial covenant ratios we are required to maintain under our senior credit agreement. It also permits us to execute exchanges of our senior subordinated bonds for shares of common stock. We do not have any current plans to enter into any debt-for-stock exchanges. Any significant debt-for-stock exchange would require approval of our stockholders. In exchange for these amendments, we agreed to a \$50 million reduction in our revolving credit facility, a 25 basis point increase in interest rates on the senior term loans and borrowings under our revolving credit facility, and paid an aggregate fee of \$3 million to consenting lenders. We also incurred legal, advisory, and other costs related to the amendment process of \$2 million.

The senior secured credit facility, as amended on March 13, 2002, consists of: (i) a \$450 million revolving credit facility with a final maturity date of November 4, 2005; (ii) a \$288 million term loan with a final maturity date of November 4, 2005; (iii) a \$262 million term loan with a final maturity date of

November 4, 2007; and (iv) a \$262 million term loan with a final maturity date of May 4, 2008. Quarterly principal repayment installments on each term loan began October 1, 2001. Borrowings under the facility bear interest at an annual rate equal to, at our option, either (i) the London Interbank Offering Rate plus a margin of 325 basis points for the revolving credit facility and the term loan maturing November 4, 2005, 400 basis points for the term loan maturing November 4, 2007 and 425 basis points for the term loan maturing May 4, 2008; or (ii) a rate consisting of the greater of the JP Morgan Chase prime rate or the Federal Funds rate plus 75 basis points, plus a margin of 225 basis points for the revolving credit facility and the term loan maturing November 4, 2005, 300 basis points for the term loan maturing November 4, 2007 and 325 basis points for the term loan maturing May 4, 2008. We also pay a commitment fee of 50 basis points on the unused portion of the revolving credit facility. Under the provisions of the senior credit facility agreement, the interest margins for borrowings under the revolving credit facility and the term loan maturing November 4, 2005 and fees paid on letters of credit issued under our revolving credit facility are subject to adjustment based on the consolidated leverage ratio (consolidated indebtedness divided by consolidated EBITDA as defined in the senior credit facility agreement) measured at the end of each quarter. Our consolidated leverage ratio fell below 4.50 as of June 30, 2002; therefore, the interest margins for borrowings under our revolving credit facility and on our term loan maturing November 4, 2005, and fees paid on letters of credit issued under our revolving credit facility, were reduced by 25 basis points beginning in the third quarter of 2002. Our consolidated leverage ratio remained below 4.50 as of December 31, 2002. Our senior secured credit facility does not contain any terms that could accelerate the payment of the facility as a result of a credit rating agency downgrade.

The amended senior credit facility requires that we maintain financial ratios equal to or better than the following consolidated leverage ratios (consolidated indebtedness divided by consolidated EBITDA), consolidated interest coverage ratios (consolidated EBITDA divided by consolidated cash interest paid), and fixed charge coverage ratios (consolidated EBITDA less consolidated capital expenditures, divided by consolidated cash interest paid) at the end of each period indicated. The financial ratios required under the amended senior credit facility and, in the case of 2002, the actual ratios we achieved are shown in the following tables:

	Quarter Ending								
	March 31, 2002			June 30, S 2002		September 30, 2002		December 31, 2002	
	Req.	Act.	Req.	Act.	Req.	Act.	Rec	g. Act.	
Leverage Ratio (maximum)	5.75	4.72	5.75	4.27	5.75	4.20	5.7	5 4.39	
Interest Coverage Ratio (minimum)	1.60	1.94	1.65	2.15	1.65	2.23	1.6	5 2.26	
Fixed Charge Coverage Ratio (minimum)	0.75	1.18	0.70	1.29	0.70	1.30	0.7	5 1.30	
				Qu	arter -	Ending			
		1	March 31, 2003	June 30, 2003	Sep	tember 30, 2003	De	cember 31, 2003	
Leverage Ratio (maximum)			5.75	5.50		5.25		5.00	
Interest Coverage Ratio (minimum)			1.65	1.75		1.80		1.95	
Fixed Charge Coverage Ratio (minimum)			0.80	0.90		0.95		1.00	
	Quarter Ending					_			
*	March 2004		June 30, 2004	September 2004	30,	December 3 2004		2005-2008	
Leverage Ratio (maximum)	4.75	5	4.50	4.25		4.00		3.50	
Interest Coverage Ratio (minimum)	2.10)	2.20	2.25		2.35		3.00	
Fixed Charge Coverage Ratio (minimum)	1.15	5	1.25	1.35		1.45		1.75	

The senior credit facility agreement also contains restrictions on our operations that are customary for similar facilities, including limitations on: (i) incurring additional liens; (ii) sale and leaseback transactions (except for the permitted transactions described above); (iii) liquidations and dissolutions; (iv) incurring additional indebtedness or guarantees; (v) capital expenditures; (vi) dividends; (vii) mergers and consolidations; and (viii) prepayments and modifications of subordinated and other debt instruments.

Compliance with these requirements and restrictions is a condition for any incremental borrowings under the senior credit facility agreement and failure to meet these requirements enables the lenders to require repayment of any outstanding loans. As of December 31, 2002, we were in compliance with both the financial covenants (as indicated above) and operational restrictions of the facility.

Our outstanding debt also includes \$500 million of 11% percent Senior Subordinated Notes due October 15, 2009. The senior subordinated debt indenture requires that we, as a condition to incurring certain types of indebtedness not otherwise permitted, maintain an interest coverage ratio of not less than 2.25. We have not incurred any of the types of indebtedness not otherwise permitted by this indenture. The indenture also contains restrictions on our operations, including limitations on: (i) incurring additional indebtedness or liens; (ii) dividends; (iii) distributions and stock repurchases; (iv) investments; and (v) mergers and consolidations. All of our existing and future material domestic wholly owned subsidiaries fully and unconditionally guarantee these notes on a joint and several basis. There are no significant restrictions on the ability of the subsidiaries that have guaranteed these notes to make distributions to us. As of December 31, 2002, we were in compliance with the covenants and restrictions of this indenture.

In addition to our senior credit facility and senior subordinated notes, we also sell some of our accounts receivable. In North America, we have an accounts receivable securitization program with a commercial bank. We sell original equipment and aftermarket receivables on a daily basis under this program. We had sold accounts receivable under this program of \$46 million and \$68 million at December 31, 2002 and 2001, respectively. This program is subject to cancellation prior to its maturity date if we were to (i) fail to pay interest or principal payments on an amount of indebtedness exceeding \$50 million, (ii) default on the financial covenant ratios under the senior credit facility, or (iii) fail to maintain certain financial ratios in connection with the accounts receivable securitization program. In January 2003, this program was amended to extend its term to January 31, 2005 and reduce the size of the program to \$50 million. The reduced program size will lower commitment fees payable on the available and unused portion of the committed facility amount. We also sell some receivables in our European operations to regional banks in Europe. At December 31, 2002, we had sold \$55 million of accounts receivable in Europe. The arrangements to sell receivables in Europe are not committed and can be cancelled at any time. If we were not able to sell receivables under either the North American or European securitization programs, our borrowings under our revolving credit agreement would increase. These accounts receivable securitization programs provide us with access to cash at costs that are generally favorable to alternative sources of financing, and allow us to reduce borrowings under our revolving credit agreement.

We believe that cash flows from operations, combined with available borrowing capacity described above, assuming that we maintain compliance with the financial covenants and other requirements of our loan agreement, will be sufficient to meet our future capital requirements for the following year, including scheduled debt principal amortization payments. Our ability to meet the financial covenants depends upon a number of operational and economic factors, many of which are beyond our control. Factors that could impact our ability to comply with the financial covenants include the rate at which consumers continue to buy new vehicles and the rate at which they continue to repair vehicles already in service, as well as our ability to successfully implement our restructuring plans. Lower North American vehicle production levels, weakening in the global aftermarket, or a reduction in vehicle production levels in Europe, beyond our expectations, could impact our ability to meet our financial covenant ratios. In the event that we are unable to meet these financial covenants, we would consider several options to meet our cash flow needs. These options could include further renegotiations with our senior credit lenders, additional cost reduction or restructuring initiatives, sales of assets or common stock, or other alternatives to enhance our financial and operating position. Should we be required to implement any of these actions to meet our cash flow needs, we believe we can do so in a reasonable time frame.

Contractual Obligations

Our remaining required debt principal amortization and payment obligations under lease and certain other financial commitments are shown in the following table:

	Payments due in:						
	2003	2004	2005	2006	2007	Beyond 2007	Total
				(Million	s)		
Obligations:							
Revolver borrowings	\$121	\$	\$ —	\$ —	\$ -	\$ —	\$ 121
Senior long-term debt	93	94	94	7	253	248	789
Long-term notes	1		1		1	3	6
Capital leases	3	3	3	2	2	6	19
Subordinated long-term debt	_			_	_	500	500
Short-term debt	10						10
Debt and capital lease obligations	228	97 [.]	98	9	256	757	1,445
Operating leases	15	13	10	8	8	9	63
Capital commitments	63						63
Total Payments	\$306	\$110	\$108	\$ 17	<u>\$264</u>	<u>\$766</u>	<u>\$1,571</u>

We principally use a revolving credit facility to finance our short-term capital requirements. As a result, we classify the outstanding balance of the revolving credit facility within our short-term debt. The revolving credit facility balance included in short-term debt is \$121 million and \$68 million at December 31, 2002 and 2001, respectively.

If we do not maintain compliance with the terms of our senior credit facility and senior subordinated debt indenture described above, all amounts under those arrangements could, automatically or at the option of the lenders or other debt holders, become due. Additionally, each of those facilities contains provisions that certain events of default under one facility will constitute a default under the other facility, allowing the acceleration of all amounts due. We currently expect to maintain compliance with terms of all of our various credit agreements for the foreseeable future.

We have also guaranteed payment and performance obligations of approximately \$4 million and \$6 million at December 31, 2002 and 2001, respectively. These guarantees are primarily related to performance of lease obligations by a former affiliate.

Dividends on Common Stock

During 2000, we paid a quarterly dividend of \$.05 per share of common stock. Dividend payments totaled \$7 million in 2000. On January 10, 2001, we announced that our Board of Directors eliminated the quarterly dividend on our common stock. The Board took the action in response to industry conditions, primarily greater than anticipated production volume reductions by original equipment manufacturers and continued softness in the global light vehicle aftermarket. There are no current plans to reinstate a dividend on our common stock.

Cash Flows

		ended ber 31,
	2002	2001
	(Mill	ions)
Cash provided (used) by:		
Operating activities	\$ 188	\$ 141
Investing activities	(107)	(126)
Financing activities	(73)	3

Operating Activities

For the year ended December 31, 2002, cash flows provided by operating activities were \$188 million compared to \$141 million in the prior year. Higher earnings in the current year were a key driver to the increased cash provided. In addition, we generated \$67 million in cash flow from working capital during 2002, compared to \$90 million in the prior year. In 2002, we generated \$102 million in cash flow through better management of our payables. At the end of 2001, we reduced payable balances by taking advantage of early payment discounts in Europe. During 2002 we returned to our customary payment schedule, which increased payables balances and improved working capital. Additionally, in June of 2002, we received a payment from an OE customer for the reimbursement of expenses related to a cancelled platform. Of the total cash payment, \$11 million was recorded in operating activities and the remaining balance was recorded in investing activities. Primarily offsetting these increases were increases in receivables as a result of lowered factoring levels and increases in inventories in anticipation of platform launches in 2003. See "Capitalization" above for a description of our accounts receivable factoring program.

In June 2001, we entered into arrangements with two major OE customers in North America under which, in exchange for a discount that is less than our marginal borrowing cost, payments for product sales are made earlier than otherwise required under existing payment terms. These arrangements reduced accounts receivable by \$40 million and \$34 million as of December 31, 2002 and 2001, respectively. These arrangements can be cancelled at any time.

On January 28, 2003 we signed a two-year extension to our accounts receivable securitization program in the U.S. The two-year program will next be subject to renewal on January 31, 2005. With the two-year extension, the size of the program has been reduced from \$65 million to \$50 million.

Investing Activities

Cash used for investing activities was \$19 million lower in 2002 compared to the prior year, due primarily to \$17 million in net proceeds from the sale of our York, U.K. facility and a \$19 million settlement from an OE customer for reimbursement of expenses related to a cancelled platform. Capital expenditures were \$138 million in 2002, up \$11 million from \$127 million in the prior year. The increase is partially attributable to capital spending for Project Genesis, which was \$11 million in 2002.

Financing Activities

Cash used for financing activities was \$73 million in 2002, compared to cash provided of \$3 million in the prior year. We made senior debt principal payments of \$111 million on our senior credit facility in 2002. Included in these payments was a pre-payment on the senior term loans of \$16 million in September using the net cash proceeds we received in the second quarter from the sale of our York, U.K. facility. Partially offsetting these payments was an estimated increase in our revolving credit facility borrowings of \$53 million.

Outlook

North America light vehicle production continued at a relatively strong pace in 2002. Manufacturer incentives kept consumer purchases higher than estimates at the beginning of the year. Consequently, the 2002 North America light vehicle build rate was an estimated 16.4 million units. However, we remain cautious regarding 2003 volumes due to continuing uncertain economic conditions in the U.S. and uncertainty about the willingness of the original equipment manufacturers to continue to support consumer automobile sales through incentives. Additionally, we believe that there could be a negative impact on consumer confidence and buying due to the threat of a war, or an actual war, in the Middle East, which could result in lower OE production levels and reduced aftermarket sales in 2003. Production of heavy-duty trucks was also strong during 2002. We believe, however, that the implementation of new emissions standards in October 2002 caused operators to pull forward their truck purchases into the first three quarters of 2002. We believe these advance purchases will reduce sales of heavy-duty trucks into 2003. In Europe, uncertain economic conditions have contributed to declining car sales, reducing light vehicle

production. Additionally, several platforms for which we provide parts have reached the end of their production, and replacement platforms have been slow to launch. These issues, combined, significantly reduced our volumes in Europe in 2002, particularly in the emissions control business. While we expect that platform launches will ramp up, offsetting part of this decline, we expect OE production to be below last year in Europe. Further, the economic problems in Argentina and uncertainty in Brazil are likely to result in lower sales in that region of the world in 2003.

Environmental and Other Matters

We are subject to a variety of environmental and pollution control laws and regulations in all jurisdictions in which we operate. We expense or capitalize, as appropriate, expenditures for ongoing compliance with environmental regulations that relate to current operations. We record expenditures that relate to an existing condition caused by past operations and that do not contribute to current or future revenue generation. We record liabilities when environmental assessments indicate that remedial efforts are probable and the costs can be reasonably estimated. Estimates of the liability are based upon currently available facts, existing technology, and presently enacted laws and regulations taking into consideration the likely effects of inflation and other societal and economic factors. We consider all available evidence including prior experience in remediation of contaminated sites, other companies' cleanup experiences and data released by the United States Environmental Protection Agency or other organizations. These estimated liabilities are subject to revision in future periods based on actual costs or new information. Where future cash flows are fixed or reliably determinable, we have discounted the liabilities. All other environmental liabilities are recorded at their undiscounted amounts. We evaluate recoveries separately from the liability and, when they are assured, recoveries are recorded and reported separately from the associated liability in our financial statements.

As of December 31, 2002, we are designated as a potentially responsible party in three Superfund sites. We have estimated our share of the remediation costs for these sites to be less than \$1 million in the aggregate. In addition to the Superfund sites, we may have the obligation to remediate current or former facilities, and we estimate our share of remediation costs at these facilities to be approximately \$14 million. For both the Superfund sites and the current and former facilities, we have established reserves that we believe are adequate for these costs. Although we believe our estimates of remediation costs are reasonable and are based on the latest available information, the cleanup costs are estimates and are subject to revision, as more information becomes available about the extent of remediation required. At some sites, we expect that other parties will contribute to the remediation costs. In addition, at the Superfund sites, the Comprehensive Environmental Response, Compensation and Liability Act provides that our liability could be joint and several, meaning that we could be required to pay in excess of our share of remediation costs. Our understanding of the financial strength of other potentially responsible parties at the Superfund sites, and of other liable parties at our current and former facilities, has been considered, where appropriate, in our determination of our estimated liability.

We undertook a third-party evaluation of estimated environmental remediation costs at one of our facilities beginning in 2000. The evaluation was initiated as a result of testing that indicated the potential underground migration of some contaminants beyond our facility property. We completed and analyzed the results of our evaluation of contamination and migration from that facility. We initially increased the reserve by \$3 million in the fourth quarter of 2000 related to on-site remediation activities and \$5 million in the first quarter of 2001 following evaluation of needed off-site remediation activities. However, after further investigation of alternative remediation technologies, we were able to identify a more efficient technology and therefore reduced the reserve by \$4 million in the fourth quarter of 2001. There have been no significant changes in the reserve for 2002.

We believe that any potential costs associated with our current status as a potentially responsible party in the Superfund sites, or as a liable party at our current or former facilities, will not be material to our results of operations or consolidated financial position.

As previously discussed, from time to time we are subject to product warranty claims whereby we are required to bear costs of repair or replacement of certain of our products. Warranty claims may range from individual customer claims to full recalls of all products in the field. In the second quarter 2002, based on available facts and data at the time, we increased our warranty reserve in the amount of \$1 million for recently identified warranty issues. Based on our investigations and achievement of other commercial resolutions of these issues since that time, we presently believe that future costs or charges, if any, related to these issues will not be material to our consolidated financial position or results of operations.

We also from time to time are involved in legal proceedings or claims that are incidental to the conduct of our business. Some of these proceedings allege damages against us relating to environmental liabilities (including toxic tort, property damage and remediation), intellectual property matters (including patent, trademark and copyright infringement, and licensing disputes), personal injury claims (including injuries due to product failure, design or warnings issues, and other product liability related matters), employment matters, and commercial or contractual disputes, sometimes related to acquisitions or divestitures. We will continue to vigorously defend ourselves against all of these claims. Although the ultimate outcome of any legal matter cannot be predicted with certainty, based on present information, including our assessment of the merits of the particular claim, we do not expect that these legal proceedings or claims will have any material adverse impact on our future consolidated financial position or results of operations. In addition, we are subject to a number of lawsuits initiated by a significant number of claimants alleging health problems as a result of exposure to asbestos. Many of these cases involve significant numbers of individual claimants. However, only a small percentage of these claimants allege that they were automobile mechanics who were allegedly exposed to our former muffler products and a significant number appear to involve workers in other industries or otherwise do not include sufficient information to determine whether there is any basis for a claim against us. We believe, based on scientific and other evidence, it is unlikely that mechanics were exposed to asbestos by our former muffler products and that, in any event, they would not be at increased risk of asbestos-related disease based on their work with these products. Further, many of these cases involve numerous defendants, with the number of each in some cases exceeding 200 defendants from a variety of industries. Additionally, the plaintiffs either do not specify any, or specify the jurisdictional minimum, dollar amount for damages. On the other hand, we are experiencing an increasing number of these claims, likely due to bankruptcies of major asbestos manufacturers. We vigorously defend ourselves against these claims as part of our ordinary course of business. To date, with respect to claims that have proceeded sufficiently through the judicial process, we have regularly achieved favorable resolution in the form of a dismissal of the claim or a judgment in our favor. Accordingly, we presently believe that these asbestos-related claims will not have a material adverse impact on our future financial condition or results of operations.

During the second quarter of 2002, we reached an agreement with an OE customer to recover our investment in development costs and related equipment, as well as amounts owed to some of our suppliers, for a platform cancelled by the customer. We collected \$30 million, net of the amounts we owed to suppliers, during the second quarter pursuant to this agreement. The agreement had no effect on our results of operations.

Employee Stock Ownership Plans

We have established Employee Stock Ownership Plans for the benefit of our employees. Under the plans, participants may elect to defer up to 16 percent of their salary through contributions to the plan, which are invested in selected mutual funds or used to buy our common stock. Through December 31, 2001, we matched qualified contributions with a contribution of 75 percent of each employee's contribution up to 8 percent of the employee's salary. Beginning January 1, 2002, this match was reduced to 50 percent of each employee's contribution up to 8 percent of the employee's salary. These matching contributions were made in common stock through December 31, 2001 and in cash starting January 1, 2002. We recorded expense for these matching contributions of approximately \$7 million and \$10 million for the years ended December 31, 2002 and 2001, respectively. All contributions vest immediately.

Derivative Financial Instruments

Foreign Currency Exchange Rate Risk

We use derivative financial instruments, principally foreign currency forward purchase and sale contracts with terms of less than one year, to hedge our exposure to changes in foreign currency exchange rates. Our primary exposure to changes in foreign currency rates results from intercompany loans made between affiliates to minimize the need for borrowings from third parties. Additionally, we enter into foreign currency forward purchase and sale contracts to mitigate our exposure to changes in exchange rates on certain intercompany and third-party trade receivables and payables. We manage counter-party credit risk by entering into derivative financial instruments with major financial institutions that can be expected to fully perform under the terms of such agreements. We have from time to time also entered into forward contracts to hedge our net investment in foreign subsidiaries. We do not currently enter into derivative financial instruments for speculative purposes.

In managing our foreign currency exposures, we identify and aggregate existing offsetting positions and then hedge residual exposures through third-party derivative contracts. The following table summarizes by major currency the notional amounts, weighted average settlement rates, and fair value for foreign currency forward purchase and sale contracts as of December 31, 2002. All contracts in the following table mature in 2003.

		December 31, 2002					
		Notional Amount in Foreign Currency	Weighted Average Settlement Rates	Fair Value in U.S. Dollars			
		(Millions Except Settlement Rates)					
Australian dollars	-Purchase	18	.561	\$ 10			
	-Sell	(64)	.561	(36)			
British pounds	-Purchase	` 94 [´]	1.610	Ì52 [°]			
•	-Sell	(48)	1.610	(77)			
Canadian dollars	-Purchase	19	.637	12			
	-Sell	(35)	.638	(22)			
Czech Republic koruna	-Purchase	26	.033	1			
•	-Sell	(514)	.033	(17)			
Danish kroner	-Purchase	` 51 [']	.141	7			
	-Sell	(462)	.141	(65)			
European euro	-Purchase	18	1.051	19			
•	-Sell	(2)	1.051	(2)			
Norwegian krone	-Purchase	38	.144	5			
	-Sell		_	_			
Polish zloty	-Purchase	54	.261	14			
	-Sell	(107)	.260	(28)			
South African rand	-Purchase		_				
	-Sell	_ ·		_			
Swedish krona	-Purchase	91	.115	10			
	-Sell	(36)	.115	(4)			
U.S. dollars	-Purchase	49	1.004	49			
	-Sell	(29)	1.002	(29)			
Other	-Purchase	66	.014	2			
	-Sell	(3)	.524	_ (2)			
				\$ 1			
				*			

Interest Rate Risk

Our financial instruments that are sensitive to market risk for changes in interest rates are our debt securities. We primarily use a revolving credit facility to finance our short-term capital requirements. We pay a current market rate of interest on these borrowings. We have financed our long-term capital requirements with long-term debt with original maturity dates ranging from six to ten years.

Under the terms of our senior credit facility agreement, we were required to hedge our exposure to floating interest rates by April 2000 so that at least 50 percent of our long-term debt was fixed for a period of at least three years. In February 2000, we hedged \$250 million of our floating rate long-term debt with three-year, floating to fixed interest rate swaps. In April 2000, we hedged an additional \$50 million of our floating rate long-term debt with three-year, floating to fixed interest rate swaps. The hedges that we executed fully satisfied the interest rate hedging requirement of the senior credit facility agreement. The swaps expired in February 2003 and we are not required to renew them. On December 31, 2002, we had \$508 million in long-term debt obligations that have fixed interest rates. Of that amount, \$500 million is fixed through October 2009, while the remainder is fixed over periods of 2003 and 2025. There is also \$709 million in long-term debt obligations that have variable interest rates based on a current market rate of interest.

We estimate that the fair value of our long-term debt at December 31, 2002 was about 82 percent of its book value. A one percentage point increase or decrease in interest rates would increase or decrease the annual interest expense we recognize in the income statement and the cash we pay for interest expense by about \$6 million after tax.

The statements and other information (including the tables) in this "Derivative Financial Instruments" section constitute "forward-looking statements."

Years 2001 and 2000

Operating Units Results

Net Sales and Operating Revenues

	2001	2000 _	% Change
	(Mil		
North America	\$1,790	\$1,946	(8)%
Europe	1,266	1,247	2
Rest of World	308	335	(8)
	\$3,364	\$3,528	(5)

Results for 2000 have been reclassified for comparability to reflect a change in how we record certain sales incentives. Effective January 1, 2001, we changed the way we classify some sales incentives in accordance with the May 2000 consensus reached by the Financial Accounting Standards Board's Emerging Issues Task Force on Issue No. 00-14, "Accounting for Certain Sales Incentives." The impact of this reclassification on 2000 results was a reduction in net sales of \$21 million with an offsetting reduction in selling, general and administrative expense.

Our North American revenues decreased \$156 million in 2001 compared to 2000 reflecting lower sales generated from both our original equipment and aftermarket businesses. OE revenues declined 8 percent to \$1,275 million in 2001 due mostly to significant OE production cutbacks in both the light and heavy-duty vehicle segments as vehicle manufacturers adjusted production levels in the face of a slowing economy. OE emissions control revenues declined 5 percent; however, excluding a \$68 million increase in catalytic converter revenues due to increased cost of precious metals that are passed through to our customers, OE emissions control revenues declined 16 percent. OE ride control revenues were down 15 percent for the year. Lower ride control volumes, especially in our heavy-duty elastomer business, contributed to the decline in OE ride control revenues. Contributing to the volume reduction was a decrease in the North American light vehicle build rate from 17.3 million units in 2000 to 15.5 million units in 2001, and a decline in the heavy duty vehicle build rate from 358,000 units in 2000 to 233,000 units in 2001. OE price reductions in both ride control and emissions control also contributed \$11 million to the North America revenue decrease. Aftermarket revenues were \$515 million in 2001, representing a decline of 7 percent from the previous year. Lower industry volumes continued to impact our North American aftermarket business. Aftermarket emissions control revenues decreased 10 percent in 2001, while our aftermarket ride control revenues declined 4 percent compared to 2000. Lower volumes accounted for \$57 million of the

reduction in aftermarket revenues. This was partially offset by revenues from a new large ride control customer beginning in the third quarter of 2001. Price increases implemented on some products in North America in the first and second quarters of 2001 took hold and more than offset negative price adjustments that were initiated during 2000.

Our European segment's revenues increased \$19 million in 2001 compared to 2000. OE revenues increased 9 percent to \$962 million in the year. Contributing to the OE revenue increase were stronger exhaust volumes, which added \$144 million of additional revenue, in both our new and existing programs. Rising precious metal prices that we have passed through to our OE exhaust customers were \$82 million of the increase. Excluding the impact of these pass-through sales, OE exhaust revenues would have increased 3 percent. Offsetting the volume increase was the devaluation of currency which reduced exhaust revenues by \$32 million. Ride control revenues were down 8 percent year over year. Lower volumes reduced revenues by \$14 million. Also the devaluation of European currencies resulted in a reduction in OE ride control revenues of \$9 million in 2001. Excluding these currency impacts, overall European OE revenues would have increased 14 percent in 2001 compared to the prior year. The overall European build rate was 19.5 million units compared to 19.9 million units in 2000. The primary reason that our European OE revenues exceeded the build rate decrease was a higher level of pass-through sales in our exhaust business. European aftermarket revenues were \$304 million in 2001 compared to \$367 million in the prior year. This 17 percent decline resulted from the continued softness of the aftermarket industry combined with declining exhaust replacement rates due primarily to the increasing original equipment use of longer lasting stainless steel. Price increases that related to our global aftermarket pricing strategy provided favorable results in 2001, contributing some positive revenue growth and helping to partially offset the impact from lower volumes. Negatively impacting European aftermarket revenue was the devaluation of European currencies, which reduced revenues by \$10 million.

Revenues from our operations in the rest of the world, specifically South America, Australia and Asia, decreased \$27 million in 2001 primarily due to the \$38 million impact of foreign currency translation. Excluding these currency impacts, total revenues for the rest of the world would have increased 3 percent compared to the same period in 2000. The impact of foreign currency was \$24 million in South America and \$14 million in Australia. This was partially offset by strong volume growth in South America and Asia. The South America volume growth is attributable to several new OE programs. In Asia, OE volumes increased due to new platforms in production at our exhaust manufacturing facility in Shanghai.

Income Before Interest Expense, Income Taxes, and Minority Interest ("EBIT")

	Year Ended December 31		
	2001	(Millions)	Change
North America	\$52	\$ 68	\$(16)
Europe	23	40	(17)
Rest of World	17	16	1
Other	_	(4)	4
	<u>\$92</u>	\$120	<u>\$(28)</u>

The EBIT results shown in the preceding table include the following items, discussed below, which have an effect on the comparability of EBIT results between periods:

	Year l Decem	
	2001	2000
	(Mill	ions)
North America		
Restructuring charges	\$20	\$30
Non-accruable restructuring – related expenses	6	14
Environmental reserve	1	_
Europe		
Restructuring charges	22	13
Non-accruable restructuring – related expenses		_
Amendment of senior credit facility	1	<u>.</u>
Environmental reserve	1	
Rest of World		
Restructuring charges	3	3
Non-accruable restructuring – related expenses		1
Amendment of senior credit facility	1	
Other		
Stock option buyback program		13
Transaction reserve reversal		(9)

EBIT for North American operations decreased to \$52 million in 2001 from \$68 million in 2000. Included in these results were charges for environmental, restructuring and restructuring-related activities of \$27 million and \$44 million in 2001 and 2000, respectively. A drop in both light and heavy-duty vehicle production volumes and a decline in the higher margin elastomer business combined to reduce 2001 EBIT for the North American OE business by \$24 million. Also, unfavorable pricing impacts were \$13 million and we incurred \$7 million in higher costs primarily related to engineering for new vehicle launches. Foreign currency losses, mostly attributable to declines in the Canadian dollar, were \$5 million. Our restructuring actions saved \$7 million. This was, however, more than offset by higher overhead costs. Lower selling, general and administrative overhead expenses and cost savings generated from our restructuring efforts improved 2001 EBIT in our North American aftermarket business by \$42 million. Also contributing \$6 million to the aftermarket EBIT increase were price increases implemented in the first and second quarters of 2001, which more than offset negative price adjustments implemented during 2000. Lower volumes resulted in a \$17 million decrease in aftermarket EBIT. Additionally, we incurred increased customer changeover costs of \$7 million compared to 2000, primarily associated with a new ride control customer.

Our European segment's EBIT decreased \$17 million to \$23 million in 2001 versus the prior year. Included in these results were charges for renegotiation of our senior credit facility, environmental remediation, restructuring and restructuring-related activities of \$24 million and \$13 million in 2001 and 2000, respectively. Foreign currency movements negatively impacted OE EBIT by \$4 million in the period. Lower volumes and negative pricing also contributed to the reduction. In our European aftermarket, improved pricing contributed \$13 million to EBIT in 2001, and lower selling, general and administrative expenses also generated \$18 million. Offsetting these increases were lower volumes which decreased aftermarket EBIT by \$27 million.

EBIT for our operations in the rest of the world increased by \$1 million in 2001 compared with the prior year. Included in these results were charges for renegotiation of our senior credit facility,

restructuring and restructuring-related activities of \$4 million in both 2001 and 2000. EBIT for our Asia operations improved due to stronger volumes in our OE exhaust operations in Shanghai. This increase was partially offset by the impact of foreign currency devaluation of \$2 million.

Other in the year 2000, includes a \$13 million charge related to a stock option buyback and a \$9 million reversal of a reserve for the transaction cost related to the November 1999 spin-off of Pactiv. These items were also included in Other in Note 10 to the consolidated financial statements included in item 8.

EBIT as a Percentage of Revenue

	Year E Decemb	
	2001	2000
North America	3%	3%
Europe	2%	3%
Rest of World	6%	5%
Total Tenneco Automotive	3%	3%

In North America, EBIT as a percentage of revenue remained flat. Production cuts by vehicle manufacturers, declines in higher-margin elastomer sales, pricing pressure from vehicle manufacturers and the increase in pass-through converter sales contributed to lower margins in our OE business. In the North America aftermarket, EBIT as a percentage of revenue improved due to lower selling, general and administrative expenses and increased prices. In addition, North American EBIT margins were significantly impacted by our restructuring activities in both 2001 and 2000. In Europe, EBIT margins decreased one percent on a 2 percent increase in revenues. This is due to the pass-through sales, which generally have a very low margin, becoming a greater percentage of total revenues. Significant improvements in OE exhaust operations were offset by costs associated with the Polish ride control plant start-up, reserves for bad debt, currency impacts and lower aftermarket volumes. Additionally, our European restructuring activities have also had a significant impact on EBIT margins. EBIT as a percentage of revenue for the rest of the world increased one percent year over year despite the impact of foreign currency devaluation. Stronger volumes and improved mix offset the foreign currency devaluation.

Interest Expense, Net of Interest Capitalized

We reported interest expense of \$170 million during 2001, compared to \$186 million during 2000. The decrease in our total interest expense is primarily due to lower interest rates on our variable rate debt. See more detailed explanations on our debt structure in "Liquidity and Capital Resources — Capitalization" earlier in this Management's Discussion and Analysis.

Income Taxes

We recorded a tax expense during 2001 of \$51 million. Tax expense for 2001 included a \$66 million expense for repatriation of earnings from some of our foreign subsidiaries. We took this action to better facilitate movement of cash balances among our overseas subsidiaries while minimizing cash tax payments in foreign jurisdictions. Our effective tax rate before this charge was a 19 percent benefit on our pre-tax loss. The primary reason that this differs from our statutory tax rate of 35 percent is the non-deductible portion of our restructuring charges. See Note 6 to the financial statements for a reconciliation of our tax expense to the statutory rate.

We recorded a tax benefit during 2000 of \$27 million, for an effective tax rate of 41 percent. This benefit was higher than the statutory rate due to the consolidation of our Mexican entities into one tax entity, allowing us to recognize some previously unbenefitted tax loss carryforwards in Mexico, and due to the adjustment of tax liabilities in some foreign jurisdictions based on tax returns filed in the third quarter.

Earnings Per Share

Losses per diluted common share were \$3.43 for the year ended December 31, 2001 compared to \$1.18 per diluted common share in the prior period. Included in the results for 2001 are the impacts from charges related to our restructuring plans, the tax charge for repatriation of foreign earnings, environmental remediation activities and the costs related to the amendment of certain terms of the senior credit facility in early 2001. The cumulative negative effect of these items on earnings per diluted common share was \$2.95 in 2001. The significant pieces of this impact were comprised of the repatriation of foreign earnings of \$1.73 per share and the restructuring charges taken in the first, second and fourth quarters which were \$1.14 per share. Included in the results for 2000 are impacts from charges related to our restructuring plans, stock option buyback program, and the reversal of the reserve for transaction costs related to the November 1999 spin-off of Pactiv. The cumulative negative effect of these items on earnings per diluted common share was \$1.28. In addition, for the year ended December 31, 2000, we recorded an extraordinary loss of \$.02 per diluted common share due to the early retirement of debt.

Dividends on Common Stock

During 2000, we paid a quarterly dividend of \$.05 per share of common stock. Dividend payments totaled \$7 million in 2000. On January 10, 2001, we announced that our Board of Directors eliminated the quarterly dividend on our common stock. The Board took the action in response to current industry conditions, primarily greater than anticipated production volume reductions by original equipment manufacturers and continued softness in the global light vehicle aftermarket. There are no current plans to reinstate a dividend on our common stock.

Cash Flows

	Year Ended December 31,	
	2001	2000
	(Mill	ions)
Cash provided (used) by:		
Operating activities	\$ 141	\$ 234
Investing activities	(126)	(157)
Financing activities	3	(123)

Operating Activities

Cash provided from operating activities decreased to \$141 million in 2001 as compared to \$234 million in 2000. Lower earnings in 2001 was a key driver to the decrease in cash provided. This was partially offset by our continued focus on working capital. Reduced accounts receivable and inventory made a favorable impact on cash flows in the current period compared to the prior year. That allowed us to use \$85 million less cash on working capital before the impact of sales of accounts receivable during 2001 compared with the prior year. Working capital, adjusted for \$110 million of receivables that were sold, was \$162 million lower than it was at the end of 2000. During 2001, we increased the size of our European receivables securitization program by \$1 million while we saw our U.S. receivables securitization program decline by \$29 million. In the same period in the prior year our receivables sales programs in Europe and North America provided \$123 million of cash. We have also entered into arrangements with two major OE customers in North America under which, in exchange for a discount that is less than our marginal borrowing cost, payments for product sales are made earlier than otherwise required under existing payment terms. These arrangements reduced accounts receivable by \$34 million as of December 31, 2001. Included in our 2001 results is a \$7 million pension plan contribution. No contribution was made in the prior year.

Investing Activities

Cash used by investing activities for continuing operations was \$31 million lower in the year ended December 31, 2001 compared to the same period in 2000. Capital expenditures were \$19 million lower at \$127 million in 2001 compared to \$146 million in 2000. In 2000, we increased our ownership percentage in a South African joint venture for \$4 million. We also received cash proceeds of \$26 million during 2000, primarily related to the sale of an interest in our Burnley, U.K. exhaust facility to Futaba. We also invested \$10 million in the new joint venture.

Financing Activities

Cash provided by financing activities was \$3 million in 2001. The increase in 2001 was attributable to a prepayment of long-term debt in 2000. Also 2000 includes a \$16 million decrease in short-term debt and \$7 million of dividend payments to our common shareholders.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

The section entitled "Derivative Financial Instruments" in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" is incorporated herein by reference.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

INDEX TO FINANCIAL STATEMENTS OF TENNECO AUTOMOTIVE INC. AND CONSOLIDATED SUBSIDIARIES

Statements of income (loss) for each of the three years in the period ended December 31, 2002		Page
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	Schedule II — Valuation and Qualifying Accounts	100

INDEPENDENT AUDITORS' REPORT

To the Board of Directors and Shareholders of Tenneco Automotive Inc.

We have audited the accompanying consolidated balance sheet of Tenneco Automotive Inc. and consolidated subsidiaries ("the Company") as of December 31, 2002, and the related consolidated statements of income (loss), cash flows, changes in shareholders' equity and comprehensive income (loss) for the year ended December 31, 2002. Our audit also included the financial statement schedule listed in the Index at Item 8. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit. The consolidated financial statements of the Company as of December 31, 2001 and for each of the two years then ended, prior to the addition of the transitional disclosures discussed in Note 3, were audited by other auditors who have ceased operations. Those auditors expressed an unqualified opinion on those financial statements in their report dated January 28, 2002.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2002 and the results of its operations and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

As discussed in Note 3, effective January 1, 2002, the Company changed its method of accounting for goodwill and intangible assets upon adoption of Statement of Financial Accounting Standards ("SFAS") No. 142, Goodwill and Other Intangible Assets.

As discussed above, the consolidated financial statements of the Company as of and for the years ended December 31, 2001 and 2000 were audited by other auditors who have ceased operations. As described in Note 3, these consolidated financial statements have been revised to include the transitional disclosures required by SFAS No. 142. We audited the transitional disclosures in Note 3. In our opinion, the transitional disclosures for 2001 and 2000 in Note 3 are appropriate. However, we were not engaged to audit, review, or apply any procedures to the 2001 or 2000 consolidated financial statements of the Company other than with respect to such transitional disclosures and, accordingly, we do not express an opinion or any other form of assurance on the 2001 or 2000 consolidated financial statements taken as a whole.

DELOITTE & TOUCHE LLP Chicago, Illinois February 3, 2003 The following report is a copy of the report previously issued by Arthur Andersen LLP ("Andersen") in connection with the filing of our Form 10-K for the year ended December 31, 2001. The inclusion of this previously issued Andersen report is pursuant to the "Temporary and Final Rule and Final Rule Requirements for Arthur Andersen LLP Auditing Clients," issued by the SEC in March 2002. Note that this previously issued Andersen report includes references to fiscal year 1999, which is not required to be presented in the accompanying consolidated financial statements for the period ended December 31, 2002. This audit report has not been reissued by Andersen in connection with the filing of this Form 10-K.

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

To Tenneco Automotive Inc.:

We have audited the accompanying balance sheets of Tenneco Automotive Inc. (a Delaware corporation) and consolidated subsidiaries (see Note 1) as of December 31, 2001 and 2000, and the related statements of income, cash flows, changes in shareholders' equity and comprehensive income for each of the three years in the period ended December 31, 2001. These financial statements and schedule referred to below are the responsibility of Tenneco Automotive Inc.'s management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Tenneco Automotive Inc. and consolidated subsidiaries as of December 31, 2001 and 2000, and the results of their operations and cash flows for each of the three years in the period ended December 31, 2001, in conformity with accounting principles generally accepted in the United States.

As discussed in Note 1 to the financial statements, in 1999 Tenneco Automotive Inc. changed its methods of accounting for the costs of start-up activities and for customer acquisition costs.

Our audits were made for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedule of Tenneco Automotive Inc. and consolidated subsidiaries is presented for purposes of complying with the Securities and Exchange Commission's rules and is not part of the basic financial statements. The supplemental schedule has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, fairly states in all material respects the financial data required to be set forth therein in relation to the basic financial statements of Tenneco Automotive Inc. and consolidated subsidiaries taken as a whole.

ARTHUR ANDERSEN LLP

Chicago, Illinois January 28, 2002

TENNECO AUTOMOTIVE INC. AND CONSOLIDATED SUBSIDIARIES STATEMENTS OF INCOME (LOSS)

	Years Ended December 31,					
	2002 2001				2000	
	(Mi	llions Excep	t Shar	e and Per S	hare A	(mounts
Revenues Net sales and operating revenues	\$	3,459	\$	3,364	<u>\$</u>	3,528
Costs and expenses Cost of sales (exclusive of depreciation shown below) Engineering, research, and development Selling, general, and administrative Depreciation and amortization of other intangibles Amortization of goodwill		2,735 67 351 144		2,699 67 353 137 16		2,766 68 428 134 17
		3,297		3,272		3,413
Other income (expense)						
Gain on sale of assets		10		3		3
Loss on sale of receivables		(2)		(5)		(1)
Other income (loss)	-	(1)		2		3
		7				5
Income before interest expense, income taxes, and						
minority interest		169		92		120
Interest expense (net of interest capitalized)		141		170		186
Income tax expense (benefit)		(7)		51		(27)
Minority interest		4		1		2
Income (loss) before extraordinary item and cumulative effect of change in accounting principle		31		(130)		(41)
Extraordinary loss, net of income tax						(1)
Income (loss) before cumulative effect of change in accounting principle		31		(130)		(42)
Cumulative effect of change in accounting principle, net of income tax		(218)		(130)		(.2)
Net loss	\$	(187)	\$	(130)	\$	(42)
	<u> </u>	(107)	===	(130)	Ψ	
Earnings (loss) per share Average shares of common stock outstanding — Basic		7,795,481 ,667,815		,779,837 ,001,248		,735,766 ,906,825
Extraordinary loss		(5.40)		_		(.02)
Cumulative effect of change in accounting principle		(5.48)				=
	\$	(4.70)	\$	(3.43)	\$	(1.20)
Diluted earnings (loss) per share of common stock — Before extraordinary item and cumulative effect of change in accounting principle Extraordinary loss	\$	0.74 (5.48)	\$	(3.43)	\$	(1.18) (.02)
Cash dividends per share of common stock	\$ \$	<u>(4.74)</u> 	\$\$ \$	(3.43)	\$ \$	(1.20)

The accompanying notes to financial statements are an integral part of these statements of income (loss).

TENNECO AUTOMOTIVE INC. AND CONSOLIDATED SUBSIDIARIES BALANCE SHEETS

	December 31,		1,	
	20	002		2001
		(Mill	lions)	ı
ASSETS				
Current assets: Cash and cash equivalents	\$	54	\$	53
Receivables — Customer notes and accounts, net		394		380
Other		15		15
Inventories		352		326
Deferred income taxes		56 95		66 101
riepayments and other		966		941
Other exects.		900		941
Other assets: Long-term notes receivable, net		14		40
Goodwill		185		423
Intangibles, net		20		18
Deferred income taxes		141		128
Pension assets		17 135		28 136
Other		512		773
Dignt moments and againment at east				1,835
Plant, property, and equipment, at cost	2	,011 985		868
•	1	,026		967
	\$ 2	,504	\$	2,681
LIABILITIES AND SHAREHOLDERS' EQUITY			=	
Current liabilities: Short-term debt (including current maturities of long-term debt)	\$	228	\$	191
Trade payables	Ψ	505	Ψ	401
Accrued taxes		40		35
Accrued interest		23		25
Accrued liabilitiesOther		172 48		148 76
Outer		,016	_	876
Long-term debt				
		,217		1,324
Deferred income taxes		103		166
Postretirement benefits.		225		174
Deferred credits and other liabilities		18		52
Commitments and contingencies Minority interest		19		15
Shareholders' equity:				
Common stock		_		
Premium on common stock and other capital surplus		,749	1	2,748
Accumulated other comprehensive loss		(357)		(375)
Retained earnings (accumulated deficit)	_(2	,246)	_(-	2,059)
Less — Shares held as treasury stock, at cost		146 240		314 240
2005 Shares held as treasury stock, at cost		$\frac{240}{(94)}$		74
	6 3		<u>e</u>	
	<u> </u>	,504	<u> </u>	2,681

The accompanying notes to financial statements are an integral part of these balance sheets.

TENNECO AUTOMOTIVE INC. AND CONSOLIDATED SUBSIDIARIES STATEMENTS OF CASH FLOWS

	Years E	mber 31,	
	2002	2001	2000
		(Millions))
Operating Activities		# (
Income (loss) before extraordinary item and cumulative effect of change in accounting principle Adjustments to reconcile income (loss) from extraordinary item and cumulative effect of change in accounting principle to cash provided (used) by operations—	\$ 31	\$(130)	\$ (41)
Depreciation and amortization Deferred income taxes (Gain) loss on sale of assets, net Changes in components of working capital—	144 (39) (8)	153 30 2	151 (43) (2)
(Increase) decrease in receivables (Increase) decrease in inventories (Increase) decrease in prepayments and other current assets Increase (decrease) in payables Increase (decrease) in accrued taxes	9 - 6 56 3	64 75 (18) (46) 2	61 (29) (14) 141 (4)
Increase (decrease) in accrued interest Increase (decrease) in other current liabilities Other	(2) (5) (7)	(9) 22 (4)	6 (4) 12
Net cash provided by operating activities	188	141	234
Investing Astivities			
Investing Activities Net proceeds from sale of businesses and assets Expenditures for plant, property, and equipment Acquisitions of businesses	24 (138) —	(127)	26 (146) (5)
Investments and other	7	<u>(10</u>)	$\underline{}$ (32)
Net cash used by investing activities	(107)	<u>(126</u>)	(157)
Net cash provided before financing activities	81	15	77
Financing Activities Issuance of common and treasury shares. Issuance of equity securities by a subsidiary Issuance of long-term debt Retirement of long-term debt	$\frac{-}{3}$ (123)	10 — — (57)	17 1 1 (107)
Net increase (decrease) in short-term debt excluding current maturities of long-term debt Dividends (common)	47	49	(16) (7)
Other		1	<u>(12</u>)
Net cash provided (used) by financing activities	<u>(73</u>)	3	(123)
Effect of foreign exchange rate changes on cash and cash equivalents	$ \overline{(7)}$		(3)
Increase (decrease) in cash and cash equivalents Cash and cash equivalents, January 1	1 53	18 35	(49) 84
Cash and cash equivalents, December 31 (Note)	\$ 54	\$ 53	\$ 35
Cash paid during the year for interest	\$ 145 \$ 27	\$ 177 \$ 17	\$ 186 \$ 18
Non-cash Investing and Financing Activities Obligation for long-term capital lease	\$ (3)	\$ —	\$ (17)

Note: Cash and cash equivalents include highly liquid investments with a maturity of three months or less at the date of purchase.

The accompanying notes to financial statements are an integral part of these statements of cash flows.

TENNECO AUTOMOTIVE INC. AND CONSOLIDATED SUBSIDIARIES STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

Years Ended December 31, 2002 2001 2000 Shares Shares Amount Shares Amount Amount (Millions Except Share Amounts) Common Stock 37,797,256 Balance January 1 41,355,074 34,970,485 Issued (Reacquired) pursuant to benefit plans (35,960)3,557,818 2,826,771 Stock options exercised 28,226 41,347,340 41,355,074 37,797,256 Balance December 31 Premium on Common Stock and Other Capital Surplus Balance January 1 2,748 2,738 2,721 Premium on common stock issued pursuant to benefit 10 17 Balance December 31 2,749 2,748 2,738 Accumulated Other Comprehensive Income (Loss) (375) (179)Balance January 1 (239)Other comprehensive income (loss)..... 18 (136)(60)(357)(375)(239)Balance December 31 Retained Earnings (Accumulated Deficit) Balance January 1 (2,059)(1,929)(1,880)Net loss (187)(130)(42)Dividends ---(7) Common stock (2,246)(2,059)(1,929)Balance December 31 Less — Common Stock Held as Treasury Stock, at Cost Balance January 1 1,294,692 240 1,298,498 240 1,298,373 240 Shares acquired..... 125 Shares issued pursuant to benefit and dividend reinvestment plans (3,806) Balance December 31 1,294,692 240 1,294,692 240 1,298,498 240 Total..... (94)74 330

The accompanying notes to financial statements are an integral part of these statements of changes in shareholders' equity.

TENNECO AUTOMOTIVE INC. AND CONSOLIDATED SUBSIDIARIES STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

			Years Ended	December 31,		
	20	002	20) 01	20	000
	Accumulated Other Comprehensive Income (Loss)	Comprehensive Income (Loss)	Accumulated Other Comprehensive Income (Loss)	Comprehensive Income (Loss)	Accumulated Other Comprehensive Income (Loss)	Comprehensive Income (Loss)
e e			(Mil	lions)	1	
Net loss		<u>\$(187)</u>		<u>\$(130</u>)		<u>\$ (42)</u>
Accumulated Other Comprehensive Income (Loss)						
Cumulative Translation Adjustment Balance January 1 Translation of foreign currency	\$(316)	40	\$(237)	(50)	\$(176)	(61)
statements	<u>(273</u>)	43	<u>(79)</u> <u>(316)</u>	(79)	$\frac{(61)}{(237)}$	(61)
Fair Value of Interest Rate Swaps Balance January 1 Fair value adjustment Balance December 31	(17) 13 (4)	13	(17) (17)	(17)		- ,
Additional Minimum Pension Liability Adjustment						
Balance January 1	(42) (61) 23	(61) 23	(64) 24	(64) 24	(3) 2 (1)	2 (1)
Balance December 31	(80) \$(357)		$\frac{(42)}{\$(375)}$		(2) \$(239)	
Other comprehensive income (loss)		18		(136)		(60)
Comprehensive loss		<u>\$(169</u>)		<u>\$(266</u>)		<u>\$(102)</u>

The accompanying notes to financial statements are an integral part of these statements of comprehensive income (loss).

1. Summary of Accounting Policies

Consolidation and Presentation

Our financial statements include all majority-owned subsidiaries. We carry investments in 20 percent to 50 percent owned companies at cost plus equity in undistributed earnings since the date of acquisition and cumulative translation adjustments. We have eliminated all significant intercompany transactions.

Sales of Accounts Receivable

We entered into an agreement during the third quarter of 2000 to sell an interest in some of our U.S. trade accounts receivable to a third party. Receivables become eligible for the program on a daily basis, at which time the receivables are sold to the third party, net of a factoring discount, through a wholly-owned subsidiary. Under this agreement, as well as individual agreements with third parties in Europe, we have sold accounts receivable of \$101 million, \$110 million, and \$138 million at December 31, 2002, 2001, and 2000, respectively. We recognized a loss of \$2 million, \$5 million, and \$1 million during 2002, 2001, and 2000, respectively, on these sales of trade accounts, representing the discount from book values at which these receivables were sold to the third party. The discount rate varies based on funding cost incurred by the third party, and it averaged 3.3 percent during the time period in 2002 when we sold receivables. We retained ownership of the remaining interest in the pool of receivables not sold to the third party. The retained interest represents a credit enhancement for the program. We value the retained interest based upon the amount we expect to collect from our customers, which approximates book value.

Inventories

At December 31, 2002 and 2001, inventory by major classification was as follows:

	2002	2001
	(Mill	ions)
Finished goods	\$164	\$149
Work in process		69
Raw materials		71
Materials and supplies	38	37
	\$352	\$326

Our inventories are stated at the lower of cost or market value. A portion of total inventories (23 percent and 25 percent at December 31, 2002 and 2001, respectively) is valued using the last-in, first-out method. If we had used the first-in, first-out ("FIFO") method of accounting for these inventories, they would have been \$13 million and \$18 million higher at December 31, 2002 and 2001, respectively. We value all other inventories using the FIFO or average cost methods at the lower of cost or market value.

Goodwill and Intangibles, net

At December 31, 2002 and 2001, goodwill and intangibles, net of amortization, by major category were as follows:

	2002	2001
	(Mill	lions)
Goodwill	\$185	\$423
Other intangible assets, net	20	18
•	\$205	<u>\$441</u>

Through the end of 2001 goodwill was being amortized on a straight-line basis over periods ranging from 15 to 40 years. Goodwill amortization amounted to \$16 million in 2001 and \$17 million in 2000, and is shown separately in the statements of income caption "Amortization of goodwill." The overall decrease in goodwill resulted from an impairment charge of \$218 million, net of taxes of \$6 million, related to a change in accounting principle and fluctuations in exchange rates applied to remaining goodwill balances. The changes in the carrying amount of goodwill for the twelve months ended December 31, 2002, are as follows:

	North America	Europe (Millions)	Other	Total
Balance at 12/31/01	\$ 329 .	\$ 46	\$ 48	\$ 423
Change in accounting principle	(192)	(32)		(224)
Translation adjustments	(1)	4	<u>(17</u>)	(14)
Balance at 12/31/02	<u>\$ 136</u>	\$ 18	<u>\$ 31</u>	\$ 185

You should read "Changes in Accounting Principles" below for information about the new goodwill accounting requirement and the charge we recorded in 2002 to recognize the cumulative effect of this change in accounting principle. You should also read Note 3 to the financial statements for additional information related to the charge recorded.

We have capitalized certain intangible assets, primarily trademarks and patents, based on their estimated fair value at the date we acquired them. We amortize these intangible assets on a straight-line basis over periods ranging from five to 30 years. Amortization of intangibles amounted to \$1 million in 2002, \$2 million in 2001, and \$3 million in 2000, and is included in the statements of income caption "Depreciation and amortization." The carrying amount and accumulated amortization are as follows:

	Decembe	er 31, 2002
	Gross Carrying Value	
	(Mi	llions)
Amortized Intangible Assets		
Patents	\$3	\$(2)
Noncompete covenants	3	(2)
Trademarks	1	(1)
Technology rights & capital subsidies	_2	<u>(1</u>)
Total	<u>\$9</u>	<u>\$(6)</u>

Non-amortized intangible assets include \$17 million for the company's intangible pension assets.

Estimated amortization of intangibles assets over the next five years is expected to be less than \$1 million each year.

Plant, Property, and Equipment, at Cost

At December 31, 2002 and 2001, plant, property, and equipment, at cost, by major category were as follows:

	2002	2001
	(Mil	lions)
Land, buildings, and improvements	1,462	\$ 348 1,332 155
·	\$2,011	\$1,835

We depreciate these properties on a straight-line basis over the estimated useful lives of the assets. Useful lives range from 10 to 40 years for buildings and improvements and from three to 25 years for machinery and equipment.

Notes Receivable and Allowance for Doubtful Accounts

Short and long-term notes receivable outstanding were \$19 million and \$50 million at December 31, 2002 and 2001, respectively. The allowance for doubtful accounts on short- and long-term notes receivable was less than \$1 million and \$7 million at December 31, 2002 and 2001, respectively.

At both December 31, 2002 and 2001, the allowance for doubtful accounts on short- and long-term accounts receivable was \$22 million.

Other Long-Term Assets

We expense pre-production design and development costs as incurred unless we have a contractual guarantee for reimbursement from the original equipment customer. We had long-term receivables of \$8 million and \$19 million on the balance sheet at December 31, 2002 and 2001, respectively, for guaranteed pre-production design and development reimbursement arrangements with our customers. In addition, property, plant and equipment includes \$50 million and \$35 million at December 31, 2002 and 2001, respectively, for original equipment tools and dies that we own, and prepayments and other includes \$27 million and \$32 million at December 31, 2002 and 2001, respectively, for in-process tools and dies that we are building for our original equipment customers.

We capitalize certain costs related to the purchase and development of software that we use in our business operations. We amortize the costs attributable to these software systems over their estimated useful lives, ranging from three to 12 years, based on various factors such as the effects of obsolescence, technology, and other economic factors. Capitalized software development costs, net of amortization, were \$89 million at each of December 31, 2002 and 2001, respectively.

Income Taxes

We utilize the liability method of accounting for income taxes whereby we recognize deferred tax assets and liabilities for the future tax consequences of temporary differences between the tax basis of assets and liabilities and their reported amounts in our financial statements. We reduce deferred tax assets by a valuation allowance when, based upon our estimates, it is more likely than not that we will not realize a portion of the deferred tax assets in a future period. The estimates utilized in the recognition of deferred tax assets are subject to revision in future periods based on new facts or circumstances.

Revenue Recognition

We recognize revenue for sales to our original equipment and aftermarket customers under the terms of our arrangements with those customers, generally at the time of shipment from our plants or distribution centers. For our aftermarket customers, we provide for promotional incentives and estimated returns at the time of sale, which are deducted from revenues. Where we have offered product warranty, we also provide for estimated warranty costs, based upon historical experience and specific warranty issues. For our OE customers, we recognize "pass-through" sales. These pass-through sales occur when, at the direction of our OE customers, we purchase components from suppliers, use them in our manufacturing process, and sell them as part of the completed system.

Earnings Per Share

We compute basic earnings per share by dividing income available to common shareholders by the weighted-average number of common shares outstanding. The computation of diluted earnings per share is similar to the computation of basic earnings per share, except that we adjust the weighted-average number of shares outstanding to include estimates of additional shares that would be issued if potentially dilutive common shares had been issued. In addition, we adjust income available to common shareholders to include any changes in income or loss that would result from the assumed issuance of the dilutive common shares.

Engineering, Research and Development

We expense engineering, research, and development costs as they are incurred. Engineering, research and development expenses were \$67 million for both 2002 and 2001, and \$68 million in 2000, and are included in the income statement caption of the same name. Of these amounts, \$6 million for both 2002 and 2001, and \$5 million in 2000 relate to research and development, which includes the search, design, and development of a new unproven product or process. Additionally, \$36 million, \$37 million, and \$40 million of engineering, research, and development expense for 2002, 2001, and 2000, respectively, relates to improvements and enhancements to existing products and processes. The remainder of the expenses in each year relate to engineering costs we incurred for application of existing products and processes to vehicle platforms. Further, our customers reimburse us for engineering, research, and development costs on some platforms when we prepare prototypes and incur costs before platform awards. Our engineering research and development expense for 2002, 2001, and 2000 has been reduced by \$13 million, \$16 million, and \$14 million, respectively, for these reimbursements.

Foreign Currency Translation

We translate the financial statements of foreign subsidiaries into U.S. dollars using the exchange rate at each balance sheet date for assets and liabilities and a weighted-average exchange rate for revenues and expenses in each period. We record translation adjustments for those subsidiaries whose local currency is their functional currency as a component of accumulated other comprehensive loss in shareholders' equity. We recognize transaction gains and losses arising from fluctuations in currency exchange rates on transactions denominated in currencies other than the functional currency in earnings as incurred, except for those transactions which hedge purchase commitments and for those intercompany balances which are designated as long-term investments. Net income (loss) included foreign currency transaction losses of \$9 million in 2002 and \$2 million in both 2001 and 2000.

Risk Management Activities

We use derivative financial instruments, principally foreign currency forward purchase and sale contracts with terms of less than one year, to hedge our exposure to changes in foreign currency exchange

rates, and interest rate swaps to hedge our exposure to changes in interest rates. Our primary exposure to changes in foreign currency rates results from intercompany loans made between affiliates to minimize the need for borrowings from third parties. Net gains or losses on these foreign currency exchange contracts that are designated as hedges are recognized in the income statement to offset the foreign currency gain or loss on the underlying transaction. Additionally, we enter into foreign currency forward purchase and sale contracts to mitigate our exposure to changes in exchange rates on some intercompany and third party trade receivables and payables. Since these anticipated transactions are not firm commitments, we mark these forward contracts to market each period and record any gain or loss in the income statement. From time to time we have also entered into forward contracts to hedge our net investment in foreign subsidiaries. We recognize the after-tax net gains or losses on these contracts on the accrual basis in the balance sheet caption "Accumulated other comprehensive income (loss)." In the statement of cash flows, cash receipts or payments related to these exchange contracts are classified consistent with the cash flows from the transaction being hedged.

We do not currently enter into derivative financial instruments for speculative purposes.

Stock Options

We account for our stock-based employee compensation plans under the recognition and measurement principles of APB Opinion No. 25, "Accounting for Stock Issued to Employees." Our stock-based employee compensation plans are described more fully in Note 7. No stock-based employee compensation cost is reflected in net income (loss), as all options granted under those plans had an exercise price equal to the market value of the stock at date of grant. As permitted by SFAS No. 123, "Accounting for Stock-Based Compensation," and amended by SFAS No. 148, "Accounting for Stock-based Compensation — Transition and Disclosure, an amendment of FASB Statement No. 123," we follow the disclosure requirements only of SFAS No. 123. The following table illustrates the effect on net income (loss) and earnings (loss) per share if we had applied the fair value recognition provisions of SFAS No. 123:

	Years Ended December 31,				
	2002	2001	2000		
		is Except Pe Amounts)	r Share		
Net income (loss)	, ,		\$ (42)		
income tax	(2)	(2)	(4)		
Pro forma net income (loss)	<u>\$ (189)</u>	<u>\$ (132)</u>	<u>\$ (46)</u>		
Earnings (loss) per share:					
Basic — as reported	\$(4.70)	\$(3.43)	\$(1.20)		
Basic — pro forma	\$(4.74)	\$(3.48)	\$(1.31)		
Diluted — as reported		\$(3.43) \$(3.48)			

The fair value of each option granted during 2002, 2001, and 2000 is estimated on the date of grant using the Black-Scholes option pricing model using the following weighted-average assumptions for grants in 2002, 2001, and 2000, respectively: (i) risk-free interest rates of 5.09 percent, 4.9 percent, and 6.3 percent,; (ii) expected lives of 10.0, 10.0, and 10.0 years; (iii) expected volatility 39.56 percent, 43.8 percent, and 40.7 percent; and (iv) dividend yield of 0.0 percentage, 0.0 percentage, and 0.0 percentage.

Changes in Accounting Principles

In July 2001, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards ("SFAS") No. 141, "Business Combinations," and SFAS No. 142, "Goodwill and Other Intangible Assets." SFAS No. 141 requires that the purchase method of accounting be used for all business combinations initiated after June 30, 2001. SFAS No. 142 changes the accounting for purchased goodwill from an amortization method to an impairment-only approach. Therefore amortization of all purchased goodwill, including amortization of goodwill recorded in past business combinations, ceased upon adoption of SFAS No. 142 in January 2002. Goodwill was amortized at the rate of \$16 million in 2001 and \$17 million in 2000, prior to adopting the new standard. Under the provisions of SFAS No. 142, we were required to perform an impairment analysis on the balance of goodwill at January 1, 2002. The fair value of our reporting units used in determining the goodwill impairment was computed using the present value of expected future cash flows. As a result of this analysis, we determined that goodwill associated with our North American ride control and European aftermarket operations was impaired. As a result, a charge of \$218 million, net of taxes of \$6 million, was recorded in the first quarter of 2002 as a cumulative effect of a change in accounting principle. The balance of unamortized goodwill was \$185 million at December 31, 2002. We are required to test this balance for impairment on an annual basis.

In June 2001, the FASB issued SFAS No. 143, "Accounting for Asset Retirement Obligations." SFAS No. 143 requires that the fair value of a liability for an asset retirement obligation be recognized in the period in which it is incurred if a reasonable estimate of fair value can be made. The associated asset retirement costs are capitalized as part of the carrying amount of the long-lived asset. SFAS No. 143 is effective for fiscal years beginning after June 15, 2002. We will be required to adopt the new standard by January 1, 2003. We do not believe that the effect of adopting this statement will have a material impact on our financial position or results of operations.

In August 2001, the FASB issued SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets." SFAS No. 144 addresses recognition, presentation and disclosure of impairment or disposal of long-lived assets. SFAS No. 144 supersedes SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Assets to be Disposed of," and Accounting Principles Board Opinion No. 30, "Reporting the Results of Operations — Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual, and Infrequently Occurring Events and Transactions, for the Disposal of a Segment of a Business." SFAS No. 144 was effective for fiscal years beginning after December 15, 2001, and interim periods within those fiscal years. The adoption of SFAS No. 144 did not have a material impact on our financial position or results of operations.

In June 2002, the FASB issued SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities." SFAS No. 146 changes the definition of the date at which a liability exists for exit or disposal activities also referred to as restructuring activities. Previously, we recognized a liability for restructuring activities when we committed to a plan of restructuring and announced this plan to the employees. We will be required to apply the new standard prospectively to new exit or disposal activities initiated after December 31, 2002. The new statement will generally require that these costs be recognized at a later date and over time, rather than in a single charge.

In November 2002, the FASB issued Interpretation No. 45 "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others" ("FIN 45"), which expands previously issued accounting guidance and disclosure requirements for certain guarantees. FIN 45 provides that issuing a guarantee imposes a noncontingent obligation to stand ready to perform in the event that the conditions specified in the guarantee occur, and that a liability representing the fair value of such a guarantee must be recognized when the guarantee is issued. We will be required to apply these initial recognition and measurement provisions to guarantees issued or modified after December 31,

2002. We do not expect the adoption of FIN 45 to have a material impact on our financial position or results of operations.

In December 2002, the FASB issued SFAS No. 148 which provides alternative methods of transition for a voluntary change to the fair value method of accounting for stock-based employee compensation and amends the disclosure requirements to require prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method used on reported results. See "Stock Options" earlier in this Note 1 for our compliance with new transition and disclosure requirements of SFAS No. 148.

In January 2003, the FASB issued Interpretation No. 46, "Consolidation of Variable Interest Entities" ("FIN 46"). FIN 46 requires that the assets, liabilities and results of the activity of variable interest entities be consolidated into the financial statements of the entity that has the controlling financial interest. FIN 46 also provides the framework for determining whether a variable interest entity should be consolidated based on voting interest or significant financial support provided to it. This interpretation is effective immediately for variable interest entities created after January 31, 2003 and effective July 1, 2003 for variable interest entities created before February 1, 2003. We do not expect the adoption of FIN 46 to have any impact on our consolidated financial statements.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. These estimates include allowances for doubtful receivables, promotional and product returns, pension and post-retirement benefit plans, income taxes, and contingencies. These items are covered in more detail in Note 1, Note 6, Note 9, and Note 11. Actual results could differ from those estimates.

Reclassifications

Prior years' financial statements have been reclassified where appropriate to conform to 2002 presentations.

2. Restructuring Charges

Over the past several years we have adopted plans to restructure portions of our operations. These plans were approved by the Board of Directors and were designed to reduce operational and administrative overhead costs throughout the business. Prior to the change in accounting required for exit or disposal activities described under "Changes in Accounting Principles" in Note 1 above, we recorded charges to income related to these plans for costs that do not benefit future activities in the period in which the plans were finalized and approved, while actions necessary to affect these restructuring plans occurred over future periods in accordance with established plans. We are conducting all workforce reductions in compliance with all legal and contractual requirements including obligations to consult with worker's councils, union representatives and others.

In the fourth quarter of 2000, our Board of Directors approved a restructuring plan to reduce administrative and operational overhead costs. We recorded, in the fourth quarter of 2000, a pre-tax charge related to the plan of \$46 million, \$32 million after tax, or \$.92 per diluted common share. Within the statement of income, \$13 million of the pre-tax charge is reflected in cost of sales, while \$33 million is included in selling, general and administrative expenses. The charge is comprised of \$24 million of severance and related costs for salaried employment reductions worldwide and \$22 million for the

reduction of manufacturing and distribution capacity in response to long-term market trends. The 2000 plan involved closing a North American aftermarket exhaust distribution facility and a ride control manufacturing plant in our Asian market, as well as the consolidation of some exhaust manufacturing facilities in Europe. In addition, the plan involved the elimination of 700 positions, including temporary employees. We wrote down the assets at the locations to be closed to their estimated fair value, less costs to sell. We estimated the market value of buildings using external real estate appraisals. As a result of the single purpose nature of the machinery and equipment to be disposed of, fair value was estimated to be scrap value less costs to dispose in most cases. We do not expect that cash proceeds on the sale of these assets will be significant. As of December 31, 2002, 637 employees have been terminated under the 2000 plan primarily in North America and Europe. Additionally, 57 temporary employees have been terminated. All restructuring actions related to this plan have been completed. We executed the plan more efficiently than initially anticipated and as a result in the fourth quarter of 2002 we reversed \$2 million of the charge to the statement of income, of which \$1 million is recorded in cost of sales and \$1 million is recorded in selling, general and administrative expenses.

Also in the fourth quarter of 2000, we recorded other charges of \$15 million, \$10 million after tax, or \$.29 per diluted common share. These charges related to a strategic decision to reduce some of the aftermarket parts we offer and to relocation expenses incurred associated with the restructuring plans. The aftermarket parts were written down to their estimated scrap value less costs to sell.

In the first quarter of 2001, our Board of Directors approved a restructuring plan in response to increasingly difficult industry conditions. On January 31, 2001, we announced plans to eliminate 405 salaried positions worldwide. We recorded pre-tax charges related to this restructuring of \$11 million, \$8 million after tax, or \$.21 per diluted common share. Within the statement of income, \$2 million of the pre-tax charge is reflected in cost of sales, while \$9 million is included in selling, general and administrative expenses. These charges are comprised of \$8 million for severance and related costs for salaried employment reductions worldwide and \$3 million for costs related to closing a testing facility in North America. As of December 31, 2002, we have eliminated 329 positions in connection with the first quarter 2001 plan. We have completed all restructuring activities related to this plan. We executed the plan more efficiently than initially anticipated and as a result in the fourth quarter of 2002 reversed \$1 million in reserves related to this restructuring activity. All of the reversal was recorded in selling, general and administrative expenses.

In the second quarter of 2001, our Board of Directors approved a separate restructuring plan related to closing a North American ride control production line. We recorded pre-tax charges related to the plan of \$8 million, \$6 million after tax, or \$.16 per diluted common share. Within the statement of income, the \$8 million charge is included in cost of sales. We wrote down the assets to their fair market value, less costs to sell. As a result of the single purpose nature of the machinery and equipment to be disposed of, fair value was estimated to be scrap value less costs to dispose. Cash proceeds from the sale of these assets were not significant. All restructuring activities related to this plan have been completed.

In the fourth quarter of 2001, our Board of Directors approved a restructuring plan, the first phase of a project known as Project Genesis, designed to lower our fixed costs, improve efficiency and utilization, and better optimize our global footprint. The first phase of Project Genesis involved closing eight facilities, improving the process flow and efficiency through value mapping and plant arrangement at 20 facilities, relocating production among facilities, and centralizing some functional areas. The closed facilities include an emissions control aftermarket plant and an aftermarket distribution operation in Europe, a ride control plant in Europe, an engineering center in Europe, one building at an emissions control plant complex in North America, a technology facility in North America, an exhaust manufacturing facility in North America, and our London-based treasury office. In the fourth quarter of 2001, we recorded pre-tax charges related to Project Genesis of \$27 million. Within the statement of income, \$23 million of the pre-tax

charge is reflected in cost of sales, while \$4 million is included in selling, general and administrative expenses. These charges are comprised of \$18 million in severance and \$9 million for equipment lease cancellation, asset impairment and other restructuring costs to close the eight facilities. We wrote down the assets at locations to be closed to their estimated fair value, less costs to sell. We estimated the market value of buildings using external real estate appraisals. As a result of the single purpose nature of the machinery and equipment to be disposed of, fair value was estimated to be scrap value less costs to dispose in most cases. We also recorded a pre-tax charge of \$4 million in cost of sales related to a strategic decision to adjust some product offerings and our customer supply strategy in the European aftermarket. The aftermarket parts were written down to their estimated scrap value, less costs to sell. Finally, we also incurred \$1 million in other restructuring related costs during the fourth quarter for the value mapping and rearrangement of one of our emissions control plants in North America. Since these costs relate to ongoing operations, they could not be accrued as part of the restructuring charge. The total of all these restructuring and other costs recorded in the fourth quarter of 2001 was \$32 million before tax, \$31 million after tax, or \$.81 per diluted common share. As of December 31, 2002, we have eliminated 945 positions in connection with the first phase of Project Genesis. Additionally, we are executing this plan more efficiently than originally anticipated and as a result in the fourth quarter of 2002 reduced our reserves related to this restructuring activity by \$6 million which is recorded in cost of sales. We expect to complete all remaining restructuring activities related to the first phase of Project Genesis in the first half of 2003.

In addition to the fourth quarter 2001 charges, we incurred other costs during 2002 of \$11 million for moving and rearrangement activities related to Project Genesis that could not be accrued as part of the restructuring charge.

Amounts related to activities that are part of all the restructuring plans discussed above are as follows:

	December 31, 2001 Restructuring Reserve	2002 Cash Payments	Charged to Asset Accounts	Impact of Exchange Rates	Reserve Adjustments	December 31, 2002 Restructuring Reserve
			(Mi	llions)		
Severance	\$23	\$(10)	\$ —	\$ 2	\$(6)	\$ 9
Asset Impairment	4	_	(4)	_	_	
Other	6	<u>(5</u>)	2		<u>(3</u>)	_
	<u>\$33</u>	<u>\$(15)</u>	<u>\$(2)</u>	<u>\$ 2</u>	<u>\$(9)</u>	<u>\$ 9</u>

In the second quarter of 2002, we sold a manufacturing facility in the U.K. that we closed in an earlier restructuring plan. Included in Charged to Asset Accounts in the preceding table is an adjustment to the assumptions made in the recording of the U.K. facility's restructuring reserve. The proceeds of \$17 million exceeded our original estimates of the market value of the property. Consequently, after the adjustment, we recorded a pre-tax gain of \$11 million on the sale in the second quarter of 2002. This gain is shown in the statement of income as a gain on sale of assets.

Under the terms of an amendment to our senior credit agreement that took effect on March 13, 2002, we are allowed to exclude up to \$60 million of cash charges and expenses, before taxes, related to potential future cost reduction initiatives over the 2002-2004 period from the calculation of the financial covenant ratios we are required to maintain under our senior credit agreement. In addition to the announced actions, we continue to evaluate additional opportunities, including additional phases of Project Genesis, to initiate actions that will reduce our costs through implementing the most appropriate and efficient logistics, distribution, and manufacturing footprint for the future. There can be no assurances however, that we will undertake additional phases of Project Genesis or other additional restructuring actions. Actions that we take, if any, will require the approval of our Board of Directors and, if the costs of the plans exceed the

amount previously approved by our senior lenders, could require approval by our senior lenders. We plan to conduct any workforce reductions that result in compliance with all legal and contractual requirements including obligations to consult with workers' councils, union representatives and others.

3. Extraordinary Loss and Cumulative Effect of Change in Accounting Principles

Extraordinary Loss

During 2000, we recognized extraordinary losses of \$1 million (net of a \$1 million income tax benefit), or \$.02 per diluted common share, related to the early retirement of a portion of our long-term debt.

Cumulative Effect of Changes in Accounting Principles

Effective January 2002, we adopted SFAS No. 142, "Goodwill and Other Intangible Assets." SFAS No. 142 changes the accounting for purchased goodwill from an amortization method to an impairment-only approach. Therefore, amortization of all purchased goodwill, including amortization of goodwill recorded in past business combinations, ceased upon adoption. Prior to the adoption of SFAS No. 142, goodwill was amortized using the straight-line method over periods ranging from 15 to 40 years.

As required by this standard, we performed an impairment analysis using discounted cash flows and market multiples. As a result, we recorded an impairment loss of \$218 million, net of tax, as a cumulative effect of a change in accounting principle in the first quarter of 2002. The impaired goodwill was associated with our North American ride control and the European aftermarket businesses. We are required to test the remaining goodwill balance for impairment on an annual basis. There has been no further impairment of goodwill since January 1, 2002.

SFAS No. 142 requires transitional disclosures of income before the cumulative effect of a change in accounting principle and basic and diluted earnings per share before the cumulative effect of the accounting change had we been accounting for goodwill under SFAS No. 142 for the years ended December 31, 2001 and 2000.

	2002	2001 (Millions)	2000
Reported income (loss) before cumulative effect of accounting change Add back goodwill amortization expense, net of tax	\$ 31 	\$ (130) <u>13</u>	\$ (42) 13
Adjusted income (loss) before cumulative effect of accounting change	\$ 31	\$ (117)	\$ (29)
Reported basic earnings (loss) per share before cumulative effect of			
accounting change	\$0.78	\$(3.43)	\$(1.20)
Add back goodwill amortization expense, net of tax		0.35	0.39
Adjusted basic earnings (loss) per share before cumulative effect of			
accounting change	\$0.78	<u>\$(3.08)</u>	<u>\$(0.81</u>)
Reported diluted earnings (loss) per share before cumulative effect of			
accounting change	\$0.74	\$(3.43)	\$(1.20)
Add back goodwill amortization expense, net of tax	_=	0.35	0.39
Adjusted diluted earnings (loss) per share before cumulative effect of			
accounting change	<u>\$0.74</u>	<u>\$(3.08)</u>	<u>\$(0.81</u>)

4. Long-Term Debt, Short-Term Debt, and Financing Arrangements

Long-Term Debt

A summary of our long-term debt obligations at December 31, 2002 and 2001, is set forth in the following table:

	_2	002	_20	001
		(Mill	ions)	t
Tenneco Automotive Inc. —				
Senior Term Loans due 2003 through 2008, average effective interest rate 5.5% in				
2002 and 5.9% in 2001	\$	789	\$	899
113/8% Senior Subordinated Notes due 2009		500		500
Debentures due 2008 through 2025, average effective interest rate 9.3% in 2002 and				
9.3% in 2001		3		3
Notes due 2003 through 2007, average effective interest rate 7.2% in 2002 and 7.9%				
in 2001		2		13
Other subsidiaries —				
Notes due 2003 through 2011, average effective interest rate 4.9% in 2002 and 6.0%				
in 2001				16
	1	,314	1.	431
Less — current maturities		97	,	107
Total long-term debt	¢ 1	217	¢1	324
rotal long-term debt	⊕ 1	,41/	<u> </u>	,344

The aggregate maturities and sinking fund requirements applicable to the issues outstanding at December 31, 2002, are \$97 million, \$97 million, \$98 million, \$9 million, and \$256 million for 2003, 2004, 2005, 2006 and 2007, respectively.

Short-Term Debt

We principally use a revolving credit facility to finance our short-term capital requirements. As a result, we classify the outstanding balance of the revolving credit facility within our short-term debt. The revolving credit facility balance included in short-term debt is \$121 million and \$68 million at December 31, 2002 and 2001, respectively. Information regarding our short-term debt as of and for the years ended December 31, 2002 and 2001, is as follows:

	2002	2001
	(Mill	ions)
Current maturities on long-term debt		
Notes payable	131	84
Total short-term debt	<u>\$228</u>	<u>\$191</u>

•	2002	2001
	Notes Payable*	Notes Payable*
	(Dollars in	Millions)
Outstanding borrowings at end of year	\$131	\$ 84
Weighted average interest rate on outstanding borrowings at end of year	6.9%	10.3%
Approximate maximum month-end outstanding borrowings during year	\$134	\$ 222
Approximate average month-end outstanding borrowings during year	\$ 91	\$ 108
Weighted average interest rate on approximate average month-end		
outstanding borrowings during year	8.3%	12.1%

^{*} Includes borrowings under both committed credit facilities and uncommitted lines of credit and similar arrangements.

Financing Arrangements

		Committed Credit Facilities(a)						
		December 31, 2002						
	Term	Commitments	Borrowings (Millions)	Letters of Credit(b)	Available			
Tenneco Automotive Inc. revolving credit agreement	2005	\$450	\$121	\$ 61	\$268			
Subsidiaries' credit agreements	Various	10 \$460	10 \$131	<u>==</u>	<u>==</u> \$268			

⁽a) We generally are required to pay commitment fees on the unused portion of the total commitment.

Our financing arrangements are primarily provided by a committed senior secured financing arrangement with a syndicate of banks and other financial institutions, which was \$1.239 billion at December 31, 2002. We entered into an agreement to amend this facility on October 20, 2000 to (i) relax the financial covenant ratios beginning in the fourth quarter of 2000, (ii) exclude up to \$80 million of cash charges and expenses related to cost reduction initiatives from the calculation of consolidated earnings before interest, taxes, depreciation and amortization ("EBITDA") used in our financial covenant ratios through 2001 and (iii) make certain other technical changes. In exchange for these amendments, we agreed to certain interest rate increases, lowered our capital expenditure limits and paid an aggregate fee of about \$3 million.

As a result of significant reductions in North American vehicle production levels announced in 2000 by our original equipment customers, as well as an accelerated weakening of the global aftermarket, we entered into a second amendment of our senior credit facility on March 22, 2001. The second amendment revised the financial covenant ratios we were required to maintain as of the end of each of the quarters ending in 2001. The second amendment also reduced the limitation on 2001 capital expenditures from \$225 million to \$150 million, and required that net cash proceeds from all significant, non-ordinary course asset sales be used to prepay the senior term loans. In exchange for these amendments, we agreed to a 25 basis point increase in interest rates on the senior term loans and borrowings under our revolving credit facility and paid an aggregate fee of \$3 million to consenting lenders. We incurred legal, advisory and other costs related to the amendment process of \$2 million.

At the time of the second amendment, we expected that we would meet with the senior lenders during the first quarter of 2002 to negotiate further amendments to the senior credit facility. Consequently,

⁽b) Letters of credit reduce the available borrowings under the revolving credit agreement.

we amended the senior credit facility for a third time on March 13, 2002. The third amendment revised the financial covenant ratios we are required to maintain as of the end of each of the quarters ending in 2002, 2003 and 2004. It also extends the limitation on annual capital expenditures of \$150 million through this three-year period. The amendment further provides us with the option to enter into sale and leaseback arrangements on up to \$200 million of our assets. The proceeds from these arrangements must be used to reduce senior debt. These senior debt prepayments would reduce the next scheduled principal amortization payments. Because the payments on senior debt from sale and leaseback transactions would be made on a pro-rata basis based on the remaining principal amounts outstanding on our Tranche A, B, and C senior term loans, but principal amortization payments are not pro-rata, about 29 percent of any sale and leaseback transactions we enter into during 2003 would reduce our scheduled principal amortization. The amendment also allows us to exclude up to \$60 million of cash charges and expenses, before taxes, related to any cost reduction initiatives over the 2002-2004 period from the calculation of the financial covenant ratios we are required to maintain under our senior credit agreement. It also permits us to execute exchanges of our senior subordinated bonds for shares of common stock. We do not have any current plans to enter into any debt-for-stock exchanges. Any significant debt-for-stock exchange would require approval of our stockholders. In exchange for these amendments, we agreed to a \$50 million reduction in our revolving credit facility, a 25 basis point increase in interest rates on the senior term loans and borrowings under our revolving credit facility, and paid an aggregate fee of \$3 million to consenting lenders. We also incurred legal, advisory, and other costs related to the amendment process of \$2 million.

The senior secured credit facility, as amended on March 13, 2002, consists of: (i) a \$450 million revolving credit facility with a final maturity date of November 4, 2005; (ii) a \$288 million term loan with a final maturity date of November 4, 2005; (iii) a \$262 million term loan with a final maturity date of November 4, 2007; and (iv) a \$262 million term loan with a final maturity date of May 4, 2008. Quarterly principal repayment installments on each term loan began October 1, 2001. Borrowings under the facility bear interest at an annual rate equal to, at our option, either (i) the London Interbank Offering Rate plus a margin of 325 basis points for the revolving credit facility and the term loan maturing November 4, 2005, 400 basis points for the term loan maturing November 4, 2007 and 425 basis points for the term loan maturing May 4, 2008; or (ii) a rate consisting of the greater of the JP Morgan Chase prime rate or the Federal Funds rate plus 75 basis points, plus a margin of 225 basis points for the revolving credit facility and the term loan maturing November 4, 2005, 300 basis points for the term loan maturing November 4, 2007 and 325 basis points for the term loan maturing May 4, 2008. We also pay a commitment fee of 50 basis points on the unused portion of the revolving credit facility. Under the provisions of the senior credit facility agreement, the interest margins for borrowings under the revolving credit facility and the term loan maturing November 4, 2005 and fees paid on letters of credit issued under our revolving credit facility are subject to adjustment based on the consolidated leverage ratio (consolidated indebtedness divided by consolidated EBITDA as defined in the senior credit facility agreement) measured at the end of each quarter. Our consolidated leverage ratio fell below 4.50 as of June 30, 2002; therefore, the interest margins for borrowings under our revolving credit facility and on our term loan maturing November 4, 2005, and fees paid on letters of credit issued under our revolving credit facility, were reduced by 25 basis points beginning in the third quarter of 2002. Our consolidated leverage ratio remained below 4.50 as of December 31, 2002. Our senior secured credit facility does not contain any terms that could accelerate the payment of the facility as a result of a credit rating agency downgrade.

The amended senior credit facility requires that we maintain financial ratios equal to or better than the following consolidated leverage ratios (consolidated indebtedness divided by consolidated EBITDA), consolidated interest coverage ratios (consolidated EBITDA divided by consolidated cash interest paid), and fixed charge coverage ratios (consolidated EBITDA less consolidated capital expenditures, divided by consolidated cash interest paid) at the end of each period indicated. The financial ratios required under the

amended senior credit facility and, in the case of 2002, the actual ratios we achieved are shown in the following tables:

·				Quarter	Ended			
	March 31, 2002		June 20		Sept	ember 30, 2002		mber 31, 2002
	Req.	Act.	Req.	Act.	Req.	Act.	Req.	Act.
Leverage Ratio (maximum)	5.75	4.72	5.75	4.27	5.75	4.20	5.75	4.39
Interest Coverage Ratio (minimum)	1.60	1.94	1.65	2.15	1.65	2.23	1.65	2.26
Fixed Charge Coverage Ratio (minimum)	0.75	1.18	0.70	1.29	0.70	1.30	0.75	1.30
					Quarter Ended			
			March 31, 2003	June 30, 2003	, S	September 30, 2003		ember 31, 2003
Leverage Ratio (maximum)			5.75	5.50		5.25		5.00
Interest Coverage Ratio (minimum)			1.65	1.75		1.80		1.95
Fixed Charge Coverage Ratio (minimum	n)		0.80	0.90		0.95		1.00
			Qua	rter Ended				
	March 200		June 30, 2004	September 2004	r 30,	December 31 2004		2005-2008
Leverage Ratio (maximum)	4.7	5	4.50	4.25		4.00		3.50
Interest Coverage Ratio (minimum)	2.1	0	2.20	2.25		2.35		3.00
Fixed Charge Coverage Ratio (minimum)	1.1	5	1.25	1.35		1.45		1.75

The senior credit facility agreement also contains restrictions on our operations that are customary for similar facilities, including limitations on: (i) incurring additional liens; (ii) sale and leaseback transactions (except for the permitted transactions described above); (iii) liquidations and dissolutions; (iv) incurring additional indebtedness or guarantees; (v) capital expenditures; (vi) dividends; (vii) mergers and consolidations; and (viii) prepayments and modifications of subordinated and other debt instruments. Compliance with these requirements and restrictions is a condition for any incremental borrowings under the senior credit facility agreement and failure to meet these requirements enables the lenders to require repayment of any outstanding loans. As of December 31, 2002, we were in compliance with both the financial covenants (as indicated above) and operational restrictions of the facility.

Our outstanding debt also includes \$500 million of 11% percent Senior Subordinated Notes due October 15, 2009. The senior subordinated debt indenture requires that we, as a condition to incurring certain types of indebtedness not otherwise permitted, maintain an interest coverage ratio of not less than 2.25. We have not incurred any of the types of indebtedness not otherwise permitted by this indenture. The indenture also contains restrictions on our operations, including limitations on: (i) incurring additional indebtedness or liens; (ii) dividends; (iii) distributions and stock repurchases; (iv) investments; and (v) mergers and consolidations. All of our existing and future material domestic wholly owned subsidiaries fully and unconditionally guarantee these notes on a joint and several basis. There are no significant restrictions on the ability of the subsidiaries that have guaranteed these notes to make distributions to us. As of December 31, 2002, we were in compliance with the covenants and restrictions of this indenture.

In addition to our senior credit facility and senior subordinated notes, we also sell some of our accounts receivable. In North America, we have an accounts receivable securitization program with a commercial bank. We sell original equipment and aftermarket receivables on a daily basis under this program. We had sold accounts receivable under this program of \$46 million and \$68 million at December 31, 2002 and 2001, respectively. This program is subject to cancellation prior to its maturity

TENNECO AUTOMOTIVE INC. AND CONSOLIDATED SUBSIDIARIES

NOTES TO FINANCIAL STATEMENTS — (Continued)

date if we were to (i) fail to pay interest or principal payments on an amount of indebtedness exceeding \$50 million, (ii) default on the financial covenant ratios under the senior credit facility, or (iii) fail to maintain certain financial ratios in connection with the accounts receivable securitization program. In January 2003, this program was amended to extend its term to January 31, 2005 and reduce the size of the program to \$50 million. The reduced program size will lower commitment fees payable on the available and unused portion of the committed facility amount. We also sell some receivables in our European operations to regional banks in Europe. At December 31, 2002, we had sold \$55 million of accounts receivable in Europe. The arrangements to sell receivables in Europe are not committed and can be cancelled at any time. If we were not able to sell receivables under either the North American or European securitization programs, our borrowings under our revolving credit agreement would increase.

We believe that cash flows from operations, combined with available borrowing capacity described above, assuming that we maintain compliance with the financial covenants and other requirements of our loan agreement, will be sufficient to meet our future capital requirements for the following year, including scheduled debt principal amortization payments. Our ability to meet the financial covenants depends upon a number of operational and economic factors, many of which are beyond our control. Factors that could impact our ability to comply with the financial covenants include the rate at which consumers continue to buy new vehicles and the rate at which they continue to repair vehicles already in service, as well as our ability to successfully implement our restructuring plans. Lower North American vehicle production levels, weakening in the global aftermarket, or a reduction in vehicle production levels in Europe, beyond our expectations, could impact our ability to meet our financial covenant ratios. In the event that we are unable to meet these financial covenants, we would consider several options to meet our cash flow needs. These options could include further renegotiations with our senior credit lenders, additional cost reduction or restructuring initiatives, sales of assets or common stock, or other alternatives to enhance our financial and operating position. Should we be required to implement any of these actions to meet our cash flow needs, we believe we can do so in a reasonable time frame.

5. Financial Instruments

The carrying and estimated fair values of our financial instruments by class at December 31, 2002 and 2001, were as follows:

	2002		2001		
	Carrying Amount	Fair Value	Carrying Amount	Fair Value	
		(Mill Assets (L			
Long-term debt (including current maturities)	\$(1,314)	\$(1,072)	\$(1,431)	\$(1,030)	
Instruments with off-balance-sheet risk		**			
Foreign currency contracts	_	1		. 1	
Financial guarantees		_		_	
Interest rate swaps	·	(4)	_	(17)	

Asset and Liability Instruments

The fair value of cash and temporary cash investments, short and long-term receivables, accounts payable, and short-term debt was considered to be the same as or was not determined to be materially different from the carrying amount.

Long-term debt — The fair value of fixed rate long-term debt was based on the market value of debt with similar maturities and interest rates.

Instruments With Off-Balance-Sheet Risk

Foreign Currency Contracts — Note 1, "Summary of Accounting Policies — Risk Management Activities" describes our use of and accounting for foreign currency exchange contracts. The following table summarizes by major currency the contractual amounts of foreign currency contracts we utilize:

	Notional Amount				
	December	31, 2002	December	31, 2001	
	Purchase	Sell	Purchase	Sell	
		(Mil	lions)		
Foreign currency contracts (in U.S.\$):					
Australian dollars	\$ 10	\$ 36	\$ 1	\$ 17	
British pounds	152	77	139	83	
Canadian dollars	12	22	4	34	
Czech Republic koruna	1	17		11	
Danish kroner	7	65	16	89	
European euro	19	2	97	3	
Norwegian krone	5		4		
Polish zloty	14	28	_	_	
South African rand			_	2	
Swedish krona	10	4	4	1	
U.S. dollars	49	29	5	29	
Other	2	2	1	1	
	<u>\$281</u>	<u>\$282</u>	<u>\$271</u>	<u>\$270</u>	

We manage counter-party credit risk by entering into derivative financial instruments with major financial institutions that can be expected to fully perform under the terms of such agreements. Based on exchange rates at December 31, 2002 and 2001, the cost of replacing these contracts in the event of non-performance by the counterparties would not have been material.

Guarantees — We occasionally provide guarantees that could require us to make future payments in the event that the primary obligor does not make its required payments. We have not recorded a liability for any of these guarantees. The only third party guarantee we have made is the performance of lease obligations by a former affiliate. Our maximum liability under this guarantee was of approximately \$4 million and \$6 million at December 31, 2002 and 2001, respectively. We have no recourse in the event of default by the former affiliate. However, we have not been required to make any payments under this guarantee.

Additionally, we have from time to time issued guarantees for the performance of obligations by some of our subsidiaries, and some of our subsidiaries have guaranteed our debt. All of our then existing and future material domestic wholly-owned subsidiaries fully and unconditionally guarantee the \$1.239 billion senior secured credit facility and the \$500 million senior subordinated notes on a joint and several basis. You should also read Note 12 where we present the Supplemental Guarantor Condensed Consolidating Financial Statements.

We have issued guarantees through letters of credit in connection with some obligations of our affiliates. We have guaranteed through letters of credit support for local credit facilities, travel and procurement card programs, and cash management requirements for some of our subsidiaries totaling \$45 million. We have also issued \$13 million in letters of credit to support some of our subsidiaries' insurance arrangements. In addition, we have issued \$3 million in guarantees through letters of credit to guarantee other obligations of subsidiaries primarily related to environmental remediation activities.

Interest Rate Swaps — Under the terms of our senior credit facility agreement, we hedged our exposure to floating interest rates by entering into floating to fixed interest rate swaps covering \$300 million of our floating rate debt. The cost of replacing these contracts in the event of non-performance by the counterparties would not be material. These hedges are effective, so we have not recognized in earnings any amounts related to the ineffectiveness of the interest rate swaps. No amounts were excluded from the assessment of hedge effectiveness. The amount reported in other comprehensive income for these interest rate swaps will be recognized in income over the remaining period of the swaps. The swaps expired in February 2003.

6. Income Taxes

The domestic and foreign components of our income before income taxes and minority interest are as follows:

Years Ended December 31,

	2002	2001	2000
•		(Millions)	
U.S. loss before income taxes	\$(65)	\$(173)	\$(192)
Foreign income before income taxes	93	95	126
Income (loss) before income taxes and minority interest	\$ 28	<u>\$ (78)</u>	<u>\$ (66)</u>
Following is a comparative analysis of the components of income tax expense:			
	Years	Ended Decer	nber 31,
	2002	2001	2000
		(Millions)	
Current —			
U.S	\$ 6	\$(8)	\$(10)
State and local	7	(6)	1
Foreign	19	_35	25
	32	21	16
Deferred —			
U.S	(31)	16	(56)
Foreign, state, and other	(8)	14	13
	(39)	30	(43)
Income tox expense (hanefit)			
Income tax expense (benefit)	<u>\$ (7)</u>	\$51	<u>\$(27)</u>

Following is a reconciliation of income taxes computed at the statutory U.S. federal income tax rate (35 percent for all years presented) to the income tax expense reflected in the statements of income:

	Years Ended December 31,		
	2002	2001	2000
		(Millions)	
Tax expense (benefit) computed at the statutory U.S. federal income tax rate Increases (reductions) in income tax expense resulting from:	\$10	\$(18)	\$(23)
Foreign income taxed at different rates and foreign losses with no tax benefit	3	2	(2)
Taxes on anticipated repatriation of dividends	(4)	66	_
State and local taxes on income, net of U.S. federal income tax benefit	1	(2)	(4)
Recognition of previously unbenefitted tax loss carryforwards	(1)	(1)	(6)
Amortization of nondeductible goodwill		4	3
Income exempt from tax due to tax holidays	(4)	(6)	_
Nondeductible restructuring expenses	(6)	8	1
Foreign earnings subject to U.S. federal income tax	7	4	7
Canadian prior years income tax refunds	(2)	_	_
Impact of Belgium rate reduction	(4)		
Other	<u>(7</u>)	<u>(6)</u>	_(3)
Income tax expense (benefit)	<u>\$(7)</u>	\$ 51	<u>\$(27)</u>

The components of our net deferred tax liability were as follows:

	Decem	ber 31,
	2002	2001
	(Mill	ions)
Deferred tax assets —		
Tax loss carryforwards:		
U.S	\$171	\$161
State	20	12
Foreign	42	46
Postretirement benefits other than pensions	37	45
Pensions	42	2
Other	55	25
Valuation allowance	<u>(45</u>)	(25)
Net deferred tax asset	322	266
Deferred tax liabilities —		
Tax over book depreciation	163	166
Other	75	75
Total deferred tax liability	238	241
Net deferred tax asset	\$ 84	\$ 25

Following is a reconciliation of deferred taxes to the deferred taxes shown in the balance sheet:

	December 31,			
	2002		2	001
		(Mili	ions))
Balance Sheet:				
Current portion — deferred tax asset	\$	56	\$	66
Non-current portion — deferred tax asset		141		128
Current portion — deferred tax liability shown in accrued taxes		(10)		(3)
Non-current portion — deferred tax liability	_(103)	_((166)
Net Deferred Tax Assets	<u>\$_</u>	84	<u>\$</u>	25

As shown by the valuation allowance in the table above, we had potential tax benefits of \$45 million and \$25 million at December 31, 2002 and 2001, respectively, that we did not recognize in the statements of income (loss) when they were generated. These unrecognized tax benefits resulted primarily from foreign tax loss carryforwards that are available to reduce future foreign tax liabilities.

We have a U.S. Federal tax net operating loss carryforward ("NOL") at December 31, 2002, of \$488 million, which will expire in varying amounts from 2018 to 2022. The federal tax effect of that NOL is \$171 million, and is recorded as an asset on our balance sheet at December 31, 2002. We estimate, based on available evidence, that it is more likely than not that we will utilize the NOL within the prescribed carryforward period. That estimate is based upon our expectations regarding future taxable income of our US operations and upon strategies available to accelerate usage of the NOL. Circumstances that could change that estimate include future U.S. earnings at lower than expected levels or a majority ownership change as defined in the rules of the U.S. tax law. If that estimate changed, we would be required to cease recognizing an income tax benefit for any new NOL and could be required to record a reserve for some or all of the asset currently recorded on our balance sheet. As of December 31, 2002, we believe that there has been a significant change in our ownership, but not a majority change, since the 1999 spin-off of Pactiv.

As of December 31, 2002, for foreign income tax purposes, we have \$42 million of foreign tax NOLs. Of the \$42 million of foreign tax NOLs, \$22 million does not expire and the remainder will expire in varying amounts from 2003 to 2010.

We do not provide for U.S. income taxes on unremitted earnings of foreign subsidiaries as our present intention is to reinvest the unremitted earnings in our foreign operations. Unremitted earnings of foreign subsidiaries are approximately \$418 million at December 31, 2002. We estimated that the amount of U.S. income taxes that would be accrued upon remittance of the assets that represent those unremitted earnings is \$96 million. In 2001, we provided current tax of \$66 million related to the repatriation of certain foreign earnings.

We have tax sharing agreements with our former affiliates that allocate tax liabilities for prior periods.

7. Common Stock

We have authorized 135 million shares (\$.01 par value) of common stock, of which 41,347,340 shares and 41,355,074 shares were issued at December 31, 2002 and 2001, respectively. We held 1,294,692 shares of treasury stock at both December 31, 2002 and 2001.

Reserved

The total number of shares of our common stock reserved at December 31, 2002 and 2001, were as follows:

	Decem	ber 31,
Original Issue Shares	2002	2001
Tenneco Automotive Inc. Stock Ownership Plan (stock award plan)*	3,438,105	5,444,374
Tenneco Automotive Inc. 2002 Long-Term Incentive Plan (stock award plan)	2,000,000	<u> </u>
	5,438,105	5,444,374
Treasury Stock		
Tenneco Automotive Inc. Supplemental Stock Ownership Plan (stock award		
plan)*	<u>1,013,601</u>	1,013,601
	<u>1,013,601</u>	1,013,601

^{*} These plans expired as to new awards on December 31, 2001.

Stock Plans

Tenneco Automotive Inc. 2002 Long-Term Incentive Plan and Other Equity Plans — In December 1996, we adopted the 1996 Stock Ownership Plan, which permitted the granting of a variety of awards, including common stock, restricted stock, performance units, stock appreciation rights ("SARs"), and stock options to our directors, officers, and employees. The plan, which terminated as to new awards on December 31, 2001, was renamed the "Tenneco Automotive Inc. Stock Ownership Plan." In December 1999, we adopted the Tenneco Automotive Inc. Supplemental Stock Ownership Plan, which permitted the granting of a variety of similar awards to our directors, officers and employees. We can issue up to about 1.1 million treasury shares of common stock under the Supplemental Stock Ownership Plan, which also terminated as to new awards on December 31, 2001. In March 2002, we adopted the Tenneco Automotive Inc. 2002 Long-Term Incentive Plan which permits the granting of a variety of similar awards to our officers, directors and employees. We can deliver up to 2 million shares of our common stock under the 2002 Long-Term Incentive Plan. At our 2003 annual meeting of stockholders, we will ask for stockholder approval of an additional 2 million shares to be available for delivery under this plan.

Restricted Stock/Units, Performance Units, and Stock Equivalent Units — We have granted restricted stock and restricted units to certain key employees. These awards generally require, among other things, that the employee remains our employee during the restriction period. We have also granted performance units to certain key employees that are payable in common stock at the end of a three year performance period after the date of grant based on the attainment of specified performance goals for the three years. We have also granted stock equivalent units to certain key employees that are payable in cash annually at the then current market price of our common stock based on the attainment of specified performance goals. During 2002, 2001, and 2000, we granted 285,822, 360,710, and 274,719 shares and units, respectively, with a weighted average fair value based on the price of our common stock on the grant date of \$3.20, \$3.37, and \$7.70 per share, respectively. At December 31, 2002, 10,000 restricted shares at an average price of \$7.47 per share, 477,172 performance units at an average price of \$7.90 per share, and 652,513 stock equivalent units at an average price of \$5.19 per unit were outstanding.

We have granted performance units to certain members of the Board of Directors who are not also an employee of the company. We also granted restricted stock to certain directors in satisfaction of residual obligations under the discontinued retirement plan for directors. During 2002, 1,000 performance units per non-employee director were issued under this program at the weighted average fair value of our stock on

the grant date of \$3.90 per share. During 2002, 2001 and 2000, 7,000, 8,000 and 1,000 performance units, respectively, were issued under this program at a weighted average fair value of our stock on the grant date of \$3.90, \$3.66 and \$5.75 per share, respectively. During 2002, 3,949 restricted shares were issued under this program to a non-employee director at the weighted average fair value of our stock on the grant date of \$3.90 per share. During 2001, 9,656 restricted shares were issued under this program at a weighted average fair value of our stock on the grant date of \$3.19. At December 31, 2002, 10,577 restricted shares and 20,000 performance units at an average price of \$4.37 and \$4.83, respectively, per unit were outstanding under this program.

We recognized after-tax stock based compensation expense in 2002 of \$4 million, in 2001 of \$2 million, and in 2000 of \$10 million.

Employee Stock Ownership Plans (401(k) Plans) — We have established Employee Stock Ownership Plans for the benefit of our employees. Under the plans, participants may elect to defer up to 16 percent of their salary through contributions to the plan, which are invested in selected mutual funds or used to buy our common stock. Through December 31, 2001, we matched qualified contributions with a contribution of 75 percent of each employee's contribution up to 8 percent of the employee's salary. Beginning January 1, 2002, this match was reduced to 50 percent of each employee's contribution up to 8 percent of the employee's salary. These matching contributions were made in company stock and approximated \$10 million and \$16 million (representing 3.7 million and 1.6 million common shares, respectively) for the years ended December 31, 2001 and 2000, respectively. These matching contributions were made in cash starting January 1, 2002 and approximated \$7 million for the year ended December 31, 2002. All contributions vest immediately.

Employee Stock Purchase Plan — Effective April 1, 1997, we adopted an Employee Stock Purchase Plan ("ESPP") that allowed U.S. and Canadian employees to purchase our common stock at a 15 percent discount. Each year employees participating in the ESPP were to able purchase shares with a discounted value not to exceed \$21,250. Under the ESPP, we sold 281,056 shares to employees in 1999. The weighted average fair value of the employee purchase right, which was estimated using the Black-Scholes option pricing model and the assumptions described below except that the average life of each purchase right was assumed to be 90 days, was \$4.29 in 1999. The ESPP was suspended in June 1999 and terminated during 2000.

Stock Options — The following table reflects the status and activity for all options to purchase common stock we have issued for the periods indicated:

	2002		2001		2000	
Stock Options	Shares Under Option	Weighted Avg. Exercise Prices	Shares Under Option	Weighted Avg. Exercise Prices	Shares Under Option	Weighted Avg. Exercise Prices
Outstanding, beginning of year	5,923,743	\$6.68	2,752,945	\$12.59	9,966,147	\$19.83
Granted	182,801	4.51	3,527,250	2.13	72,083	8.82
Cancelled	(87,270)	4.70	(356,452)	7.30	(1,268,310)	21.90
Stock option buyback		·		_	(6,016,975)	22.57
Exercised	(28,226)	3.26		_		_
Outstanding, end of year	5,991,048	6.66	5,923,743	6.68	2,752,945	12.59
Options exercisable at end of year Weighted average fair value of options	3,577,152	\$9.48	1,979,399	\$14.06	1,433,520	\$16.34
granted during the year		\$2.71		\$ 1.33		\$ 5.64

The following table reflects summarized information about stock options outstanding at December 31, 2002:

	Options Outstanding			Options Exercisable		
Range of Exercise Price	Number Outstanding at 12/31/02	Weighted Avg. Remaining Contractual Life	Weighted Avg. Exercise Price	Weighted Number Exercisable at 12/31/02	Avg. Exercise Price	
\$ 1.57 - \$ 8.00	3,531,548	8.7 years	\$ 2.20	1,204,518	\$ 2.08	
\$ 8.00 - \$14.00	1,714,228	6.9 years	8.57	1,627,362	8.58	
\$14.00 - \$21.00	105,767	13.8 years	19.53	105,767	19.53	
\$21.00 - \$27.00	639,505	4.3 years	24.03	639,505	24.03	
1 1	5,991,048		,	3,577,152		

Rights Plan

On September 9, 1998, we adopted a Rights Plan and established an independent Board committee to review it every three years. The Rights Plan was adopted to deter coercive takeover tactics and to prevent a potential acquirer from gaining control of us in a transaction that is not in the best interests of our shareholders. Generally, under the Rights Plan, as it has been amended, if a person becomes the beneficial owner of 15 percent or more of our outstanding common stock, each right will entitle its holder to purchase, at the right's exercise price, a number of shares of our common stock or, under certain circumstances, of the acquiring person's common stock, having a market value of twice the right's exercise price. Rights held by the 15 percent or more holders will become void and will not be exercisable.

In March 2000, we amended the Rights Plan to (i) reduce from 20 percent to 15 percent the level of beneficial ownership at which the rights became exercisable, as described above, and (ii) eliminate the "qualified offer" terms of the plan. These terms provided that the rights would not become exercisable in connection with a "qualified offer," which was defined as an all-cash tender offer for all outstanding common stock that was fully financed, remained open for a period of at least 60 business days, resulted in the offeror owning at least 85 percent of our common stock after consummation of the offer, assured a prompt second-step acquisition of shares not purchased in the initial offer, at the same price as the initial offer, and met certain other requirements.

In connection with the adoption of the Rights Plan, our Board of Directors also adopted a three-year independent director evaluation ("TIDE") mechanism. Under the TIDE mechanism, an independent Board committee will review, on an ongoing basis, the Rights Plan and developments in rights plans generally, and, if it deems appropriate, recommend modification or termination of the Rights Plan. The independent committee will report to our Board at least every three years as to whether the Rights Plan continues to be in the best interests of our shareholders.

Dividend Reinvestment and Stock Purchase Plan

Under the Tenneco Automotive Inc. Dividend Reinvestment and Stock Purchase Plan, holders of our common stock may apply cash dividends, if any, and optional cash investments to the purchase of additional shares of our common stock. We have not paid dividends on our common stock since fourth quarter of 2000.

Earnings Per Share

Earnings (loss) per share of common stock outstanding were computed as follows:

	Years Ended December 31,			
	2002 2001		2000	
	(Millions Exce	Share Amounts)		
Basic earnings (loss) per share — Income (loss) before extraordinary loss and cumulative effect of change in accounting principle	\$ 31	\$ (130)	\$ (41)	
Average shares of common stock outstanding	39,795,481	37,779,837	34,735,766	
Earnings (loss) per average share of common stock	\$ 0.78	<u>\$ (3.43)</u>	<u>\$ (1.18)</u>	
Diluted earnings (loss) per share — Income (loss) before extraordinary loss and cumulative effect of change in accounting principle	\$ 31	\$ (130)	\$ (41)	
Average shares of common stock outstanding Effect of dilutive securities: Restricted stock	39,795,481 117,578	37,779,837	34,735,766 13,650	
Stock options Performance shares	1,302,410 452,346	61,715 159,696	438 156,971	
Average shares of common stock outstanding including dilutive securities	41,667,815	38,001,248	34,906,825	
Earnings (loss) per average share of common stock	\$ 0.74	\$ (3.43)	\$ (1.18)	

8. Preferred Stock

We had 50 million shares of preferred stock (\$.01 par value) authorized at December 31, 2002 and 2001. No shares of preferred stock were outstanding at those dates. We have designated and reserved 2 million shares of the preferred stock as junior preferred stock for the Rights Plan.

9. Pension Plans and Other Postretirement Benefits

We have various defined benefit pension plans that cover substantially all of our employees. Benefits are based on years of service and, for most salaried employees, on final average compensation. Our funding policy is to contribute to the plans amounts necessary to satisfy the funding requirement of applicable federal or foreign laws and regulations. Plan assets consist principally of listed equity and fixed income securities.

We have postretirement health care and life insurance plans that cover a majority of our domestic employees. For salaried employees, the plans cover our employees retiring on or after attaining age 55 who have had at least 10 years of service with us after attaining age 45. For hourly employees, the postretirement benefit plans generally cover employees who retire according to one of our hourly employee retirement plans. All of these benefits may be subject to deductibles, copayment provisions, and other limitations, and we have reserved the right to change these benefits. Our postretirement healthcare and life insurance plans are not funded.

A summary of the change in benefit obligation, the change in plan assets, the development of net amount recognized, and the amounts recognized in the balance sheets for the pension plans and postretirement benefit plans follows:

	Pension		Postreti	rement
	2002	2001	2002	2001
		(Milli	ons)	
Change in benefit obligation:				
Benefit obligation at September 30 of the previous year	\$ 348	\$ 316	\$ 137	\$ 101
Currency rate conversion	14	(9)	_	
Curtailment	(1)	1		(1)
Service cost	14	13	4	3
Interest cost	24	22	10	8
Plan amendments/new salaried plan	1		(12)	2
Actuarial loss	27	25	27	34
Benefits paid	(18)	(20)	(12)	(10)
Participants' contributions			1	
Benefit obligation at September 30	<u>\$ 409</u>	<u>\$ 348</u>	\$ 155	\$ 137
Change in plan assets:				
Fair value at September 30 of the previous year	\$ 235	\$ 294	\$	\$ —
Currency rate conversion	9	(9)		_
Curtailment	(1)			
Actual return on plan assets	(21)	(46)	_	_
Employer contributions	19	15	11	10
Participants' contributions	1	1	1	_
Benefits paid	(18)	(20)	(12)	(10)
Fair value at September 30	\$ 224	\$ 235	<u>\$</u>	<u>\$</u>
Development of net amount recognized:				
Funded status at September 30	\$(185)	\$(113)	\$(155)	\$(137)
Contributions during the fourth quarter	3	1	3	2
Unrecognized cost:				
Actuarial loss	156	80	78	54
Prior service cost	35	37	(24)	(12)
Transition asset	(2)	(2)		
Net amount recognized at December 31	<u>\$ 7</u>	\$ 3	<u>\$ (98</u>)	<u>\$ (93)</u>
Amounts recognized in the balance sheets:				
Prepaid benefit cost	\$ 17	\$ 15	\$ —	\$ -
Accrued benefit cost	(154)	(92)	(98)	(93)
Intangible asset	16	14		
Accumulated other comprehensive income	128	66		
Net amount recognized	\$ 7	\$ 3	\$ (98)	\$ (93)
-		===	===	

Notes: Assets of one plan may not be utilized to pay benefits of other plans. Additionally, the prepaid (accrued) pension cost has been recorded based upon certain actuarial estimates as described below. Those estimates are subject to revision in future periods given new facts or circumstances.

Net periodic pension costs (income) for the years 2002, 2001, and 2000, consist of the following components:

	2002	2001 (Millions)	2000
Service cost — benefits earned during the year	\$ 14	\$ 13	\$ 14
Interest on prior year's projected benefit obligation	24	22	21
Expected return on plan assets	(28)	(25)	(24)
Curtailment gain		(1)	(2)
Net amortization:			
Actuarial loss	1	-	
Prior service cost	3	3	3
Net pension costs	\$ 14	\$ 12	\$ 12
Other comprehensive income (loss)	<u>\$ 61</u>	\$ 63	<u>\$ (1</u>)

The projected benefit obligation, accumulated benefit obligation, and fair value of plan assets for all pension plans with accumulated benefit obligations in excess of plan assets were \$383 million, \$341 million, and \$194 million, respectively, as of September 30, 2002, \$319 million, \$286 million, and \$200 million, respectively, as of September 30, 2001, and \$44 million, \$40 million, and \$7 million, respectively, as of September 30, 2000.

The weighted average discount rates (which are based on long-term market rates) used in determining the 2002, 2001, and 2000 actuarial present value of the benefit obligations were 6.5 percent, 6.9 percent, and 7.3 percent, respectively. The rate of increase in future compensation was 4.2 percent for 2002 and 4.3 percent for each of 2001 and 2000. The weighted average expected long-term rate of return on plan assets for 2002 was 8.4 percent and 9.4 percent for each of 2001 and 2000.

We made contributions of \$21 million to these pension plans during 2002. Based on current actuarial estimates, we believe we will be required to make contributions of about \$20 million to these plans during 2003. Pension contributions beyond 2003 will be required, but those amounts will vary based upon many factors, including the performance of our pension fund investments during 2003.

Net periodic postretirement benefit cost for the years 2002, 2001, and 2000, consist of the following components:

	2002	2001 Millions)	2000
Service cost — benefits earned during the year	\$ 4	\$ 3	\$ 4
Interest on accumulated postretirement benefit obligation	10	8	9
Net amortization:			
Actuarial loss	3	1	1
Prior service cost	(1)	(2)	_
Curtailment gain		<u>(2)</u>	_(1)
Net periodic postretirement benefit cost	<u>\$16</u>	\$ 8	\$13

The weighted average assumed health care cost trend rate used in determining the 2002 accumulated postretirement benefit obligation was 10 percent, declining by 1 percent each year through 2007. In 2001 and 2000 the health care cost trend rate was 10 percent and 5 percent, respectively.

Increasing the assumed health care cost trend rate by one percentage point in each year would increase the 2002, 2001, and 2000, accumulated postretirement benefit obligations by approximately \$17 million, \$15 million, and \$11 million, respectively, and would increase the aggregate of the service cost

and interest cost components of the net periodic postretirement benefit cost by approximately \$2 million each year for 2002, 2001 and 2000.

Decreasing the assumed health care cost trend rate by one percentage point in each year would decrease the 2002 accumulated postretirement benefit obligation by approximately \$15 million and would decrease the aggregate of the service cost and interest cost components of the net periodic postretirement benefit cost by approximately \$2 million.

The discount rates (which are based on long-term market rates) used in determining the 2002, 2001, and 2000 accumulated postretirement benefit obligations were 7.00 percent, 7.25 percent, and 8.0 percent respectively.

10. Segment and Geographic Area Information

We are a global manufacturer with two geographic reportable segments: North America and Europe. Each segment manufactures and distributes ride control and emission control products primarily for the automotive industry. We have not aggregated individual operating segments within these reportable segments. The accounting policies of the segments are the same as described in Note 1, "Summary of Accounting Policies." We evaluate segment performance based primarily on income before interest expense, income taxes, and minority interest. Products are transferred between segments and geographic areas on a basis intended to reflect as nearly as possible the "market value" of the products. Segment results for 2002, 2001, and 2000 are as follows:

	Segment						
	North	-			Reclass &		
	America	Europe	Other	Elims	Consolidated		
			(Million	is)			
At December 31, 2002, and for the Year Then Ended					. •		
Revenues from external customers	\$1,898	\$1,221	\$340	\$ —	\$3,459		
Intersegment revenues	8	33	12	(53)			
Interest income	_	1	1	_	2		
Depreciation and amortization	78	43	23		144		
Income before interest, income taxes, and minority interest	129	18	22	_	169		
Extraordinary loss	192	26	_		218		
Cumulative effect of change in accounting principle	795	26 984	623	102			
Total assets Investment in affiliated companies	193	704 1	023 7	102	2,504 8		
Capital expenditures	66	56	16	_	138		
Noncash items other than depreciation and amortization		(9)	(4)	_	(9)		
At December 31, 2001, and for the Year Then Ended		.,.			•		
Revenues from external customers	\$1.790	\$1,266	\$308	\$	\$3,364		
Intersegment revenues	9	39	10	58	_		
Interest income	_	1	2	_	3		
Depreciation and amortization	91	38	24		153		
Income before interest, income taxes, and minority interest	52	23	17		92		
Extraordinary loss	_	_	_	_	_		
Cumulative effect of change in accounting principle	_	' —	_	_			
Total assets	1,072	893	614	102	2,681		
Investment in affiliated companies	_	1	9	_	10		
Capital expenditures	50	64	13	_	127		
Noncash items other than depreciation and amortization	12	(11)	(13)		(12)		
At December 31, 2000, and for the Year Then Ended							
Revenues from external customers	\$1,946	\$1,247	\$335	\$ <u> </u>	\$3,528		
Intersegment revenues	10	45	13	(68)	_		
Interest income	_	1	2	_	3		

	Segment				
	North America Europe				
•			(Million	is)	
Depreciation and amortization	85	42	24	_	151
Income before interest, income taxes, and minority interest	68	40	12		120
Extraordinary loss		_	(1)	_	(1)
Cumulative effect of change in accounting principle			_	_	
Total assets	1,213	- 980	664	(29)	2,886
Investment in affiliated companies	_	. 11	—	_	.11
Capital expenditures	71	59	16		146
Noncash items other than depreciation and amortization	11	(6)	(3)	_	2

The following table shows information relating to our external customer revenues for each product or each group of similar products:

	Net Sales and Operating Revenues Year Ended December 31,			
	2002	2001	2000	
		(Millions)		
Emissions Control Systems & Products				
Aftermarket	\$ 359	\$ 387	\$ 445	
Original equipment market	1,880	1,805	1,758	
	2,239	2,192	2,203	
Ride Control Systems & Products				
Aftermarket	\$ 549	\$ 548	\$ 610	
Original equipment market	<u>671</u>	624	715	
	1,220	1,172	1,325	
Total	<u>\$3,459</u>	<u>\$3,364</u>	\$3,528	

During 2002, sales to four major customers comprised approximately 19.8 percent, 13.3 percent, 10.1 percent, and 10.1 percent of consolidated net sales and operating revenues. During 2001, sales to four major customers comprised approximately 19.6 percent, 10.9 percent, 10.6 percent, and 10.4 percent of consolidated net sales and operating revenues. During 2000, sales to four major customers comprised approximately 16.6 percent, 13.5 percent, 11.5 percent, and 9.7 percent of consolidated net sales and operating revenues.

	Geographic Area						
	United States	Germany	Other Foreign(a)	Reclass & Elims	Consolidated		
			(Millions	s)			
At December 31, 2002, and for the Year Then Ended							
Revenues from external customers(b)	\$1,544	\$443	\$1,472	\$ —	\$3,459		
Long-lived assets(d)	487	112	625		1,224		
Total assets	1,122	240	1,200	(58)	2,504		
At December 31, 2001, and for the Year Then Ended							
Revenues from external customers(b)	\$1,409	\$475	\$1,480	\$ -	\$3,364		
Long-lived assets(d)	518	84	419		1,021		
Total assets	1,353	216	1,179	(67)	2,681		
At December 31, 2000, and for the Year Then Ended							
Revenues from external customers(b)(c)	\$1,566	\$415	\$1,547	\$ -	\$3,528		
Long-lived assets(d)	556	82	566		1,204		
Total assets	1,436	223	1,333	(106)	2,886		

Notes: (a) Revenues from external customers and long-lived assets for individual foreign countries other than Germany are not material.

- (b) Revenues are attributed to countries based on location of the seller.
- (c) Revenues have been adjusted for the change in accounting for certain sales incentives
- (d) Long-lived assets include all long-term assets except goodwill, intangibles, and deferred tax assets.

11. Commitments and Contingencies

Capital Commitments

We estimate that expenditures aggregating approximately \$63 million will be required after December 31, 2002 to complete facilities and projects authorized at such date, and we have made substantial commitments in connection with these facilities and projects.

Lease Commitments

We have long-term leases for certain facilities, equipment, and other assets. The minimum lease payments under non-cancelable leases with lease terms in excess of one year are:

,	2003	2004	2005	<u>2006</u>	2007	Subsequent Years
	(Millions)					
Operating Leases	\$15	\$13	\$10	\$8	\$8	\$9
Capital Leases	\$ 3	\$ 3	\$ 3	\$3	\$3	\$7

Total rental expense for the year 2002, 2001, and 2000 was \$33 million, \$30 million, and \$36 million respectively.

Contingencies

During the second quarter of 2002, we reached an agreement with an OE customer to recover our investment in development costs and related equipment, as well as amounts owed to some of our suppliers, for a platform cancelled by the customer. We collected \$30 million, net of the amounts we owed to suppliers, during the second quarter pursuant to this agreement. The agreement had no effect on our results of operations.

Litigation

We also from time to time are involved in legal proceedings or claims that are incidental to the conduct of our business. Some of these proceedings allege damages against us relating to environmental liabilities (including toxic tort, property damage and remediation), intellectual property matters (including patent, trademark and copyright infringement, and licensing disputes), personal injury claims (including injuries due to product failure, design or warnings issues, and other product liability related matters), employment matters, and commercial or contractual disputes, sometimes related to acquisitions or divestitures. We will continue to vigorously defend ourselves against all of these claims. Although the ultimate outcome of any legal matter cannot be predicted with certainty, based on present information, including our assessment of the merits of the particular claim, we do not expect that these legal proceedings or claims will have any material adverse impact on our future consolidated financial position or results of operations. In addition, we are subject to a number of lawsuits initiated by a significant number of claimants alleging health problems as a result of exposure to asbestos. Many of these cases involve significant numbers of individual claimants. However, only a small percentage of these claimants allege that they were automobile mechanics who were allegedly exposed to our former muffler products and a significant number appear to involve workers in other industries or otherwise do not include sufficient information to determine whether there is any basis for a claim against us. We believe, based on scientific and other evidence, it is unlikely that mechanics were exposed to asbestos by our former muffler products and that, in any event, they would not be at increased risk of asbestos-related disease based on their work with these products. Further, many of these cases involve numerous defendants, with the number of each in some cases exceeding 200 defendants from a variety of industries. Additionally, the plaintiffs either do not specify any, or specify the jurisdictional minimum, dollar amount for damages. On the other hand, we are experiencing an increasing number of these claims, likely due to bankruptcies of major asbestos manufacturers. We vigorously defend ourselves against these claims as part of our ordinary course of business. To date, with respect to claims that have proceeded sufficiently through the judicial process, we have regularly achieved favorable resolution in the form of a dismissal of the claim or a judgment in our favor. Accordingly, we presently believe that these asbestos-related claims will not have a material adverse impact on our future financial condition or results of operations.

Product Warranties

We provide warranties on some of our products. The warranty terms vary but range from one year up to limited lifetime warranties on some of our premium aftermarket products. Provisions for estimated expenses related to product warranty are made at the time products are sold or when specific warranty issues are identified on OE products. These estimates are established using historical information about the nature, frequency, and average cost of warranty claims. We actively study trends of warranty claims and take action to improve product quality and minimize warranty claims. We believe that the warranty reserve is appropriate; however, actual claims incurred could differ from the original estimates, requiring adjustments to the reserve. The reserve is included in both long-term and short-term liabilities on the balance sheet.

Below is a table that shows the activity in the warranty accrual accounts:

	Years Ended December 31,			
	2002	2001	2000	
	((Millions)	
Beginning Balance	\$19	\$16	\$21	
Accruals related to product warranties	15	18	14	
Reductions for payments made	<u>13</u>	<u>15</u>	<u>19</u>	
Ending Balance	<u>\$21</u>	<u>\$19</u>	<u>\$16</u>	

Environmental Matters

We are subject to a variety of environmental and pollution control laws and regulations in all jurisdictions in which we operate. We expense or capitalize, as appropriate, expenditures for ongoing compliance with environmental regulations that relate to current operations. We record expenditures that relate to an existing condition caused by past operations and that do not contribute to current or future revenue generation. We record liabilities when environmental assessments indicate that remedial efforts are probable and the costs can be reasonably estimated. Estimates of the liability are based upon currently available facts, existing technology, and presently enacted laws and regulations taking into consideration the likely effects of inflation and other societal and economic factors. We consider all available evidence including prior experience in remediation of contaminated sites, other companies' cleanup experiences and data released by the United States Environmental Protection Agency or other organizations. These estimated liabilities are subject to revision in future periods based on actual costs or new information. Where future cash flows are fixed or reliably determinable, we have discounted the liabilities. All other environmental liabilities are recorded at their undiscounted amounts. We evaluate recoveries separately from the liability and, when they are assured, recoveries are recorded and reported separately from the associated liability in our financial statements.

As of December 31, 2002, we are designated as a potentially responsible party in three Superfund sites. We have estimated our share of the remediation costs for these sites to be less than \$1 million in the aggregate. In addition to the Superfund sites, we may have the obligation to remediate current or former facilities, and we estimate our share of remediation costs at these facilities to be approximately \$14 million. For both the Superfund sites and the current and former facilities, we have established reserves that we believe are adequate for these costs. Although we believe our estimates of remediation costs are reasonable and are based on the latest available information, the cleanup costs are estimates and are subject to revision, as more information becomes available about the extent of remediation required. At some sites, we expect that other parties will contribute to the remediation costs. In addition, at the Superfund sites, the Comprehensive Environmental Response, Compensation and Liability Act provides that our liability could be joint and several, meaning that we could be required to pay in excess of our share of remediation costs. Our understanding of the financial strength of other potentially responsible parties at the Superfund sites, and of other liable parties at our current and former facilities, has been considered, where appropriate, in our determination of our estimated liability.

We undertook a third-party evaluation of estimated environmental remediation costs at one of our facilities beginning in 2000. The evaluation was initiated as a result of testing that indicated the potential underground migration of some contaminants beyond our facility property. We completed and analyzed the results of our evaluation of contamination and migration from that facility. We initially increased the reserve by \$3 million in the fourth quarter of 2000 related to on-site remediation activities and \$5 million in the first quarter of 2001 following evaluation of needed off-site remediation activities. However, after

further investigation of alternative remediation technologies, we were able to identify a more efficient technology and therefore reduced the reserve by \$4 million in the fourth quarter of 2001. There have been no significant changes in the reserve for 2002.

We believe that any potential costs associated with our current status as a potentially responsible party in the Superfund sites, or as a liable party at our current or former facilities, will not be material to our results of operations or consolidated financial position.

12. Supplemental Guarantor Condensed Consolidating Financial Statements

Basis of Presentation

We issued senior subordinated notes due 2009 as a component of a plan to realign our debt. You should also read Note 5, "Financial Instruments" for further discussion of the notes and related guarantee. All of our existing and future material domestic wholly owned subsidiaries (which comprise the Guarantor Subsidiaries) fully and unconditionally guarantee the notes on a joint and several basis. We have not presented separate financial statements and other disclosures concerning each of the Guarantor Subsidiaries because management has determined that such information is not material to the holders of the notes. Therefore, the Guarantor Subsidiaries are combined in the presentation below.

These condensed consolidating financial statements are presented on the equity method. Under this method, our investments are recorded at cost and adjusted for our ownership share of a subsidiary's cumulative results of operations, capital contributions and distributions, and other equity changes. You should read the condensed consolidating financial statements of the Guarantor Subsidiaries in connection with our consolidated financial statements and related notes of which this note is an integral part.

Distributions

There are no significant restrictions on the ability of the Guarantor Subsidiaries to make distributions to us.

STATEMENT OF INCOME (LOSS)

		For the Year	r Ended December	31, 2002	
· · · · · · · · · · · · · · · · · · ·	Guarantor Subsidiaries	Nonguarantor Subsidiaries	Tenneco Automotive Inc. (Parent Company) (Millions)	Reclass & Elims	Consolidated
Revenues			` ,		
Net sales and operating revenues —					
External	\$1,544	\$1,915	\$ —	\$ -	\$3,459
Affiliated companies	48	82		(130)	
	1,592	1,997		(130)	3,459
Costs and expenses					
Cost of sales (exclusive of depreciation					
shown below)	1,218	1,647		(130)	2,735
Engineering, research, and development	20	47			. 67
Selling, general, and administrative	196	155		_	351
Depreciation and amortization of other	72	72	*		1.44
intangibles	72	72		_	144
Amortization of goodwill					
	1,506	1,921		<u>(130</u>)	3,297
Other income (expense)					
Gain (loss) on sale of assets	(1)	11	- .	_	10
Loss on sale of receivables	(2)				(2)
Other income (loss)	95	<u>(14)</u>	<u>98</u>	<u>(180</u>)	(1)
	92	<u>(3</u>)	98	<u>(180</u>)	7
Income (loss) before interest expense, income taxes, minority interest, and equity in net income from affiliated companies	178	73	98	(180)	. 169
Interest expense —					
External (net of interest capitalized)	(1)	3	139		141
Affiliated companies (net of	70	4	(7.6)	•	
interest income)	72 (8)	4 23	(76) (22)	_	- (7)
Minority interest	(6)	4	. (22).	_	4
withoutly intolose	115		57	(190)	31
Equity in net income (loss) from	113	39	37	(180)	. 31
affiliated companies	35	(2)	(244)	211	
Income (loss) before extraordinary loss and cumulative effect of change in	1.50		(107)	2.1	21
accounting principle	150	37	(187)	31	31
Extraordinary loss, net of income tax					
Income (loss) before cumulative effect of change in accounting principle Cumulative effect of change in	150	37	(187)	31	31
accounting principle, net of income tax	(171)	(47)			(218)
Net income (loss)	\$ (21)	\$ (10)	\$(187)	\$ 31	\$ (187)
, ,		· ======	 ′		 ′

STATEMENT OF INCOME (LOSS)

•	For the Year Ended December 31, 2001							
	Guarantor Subsidiaries	Nonguarantor Subsidiaries	Tenneco Automotive Inc. (Parent Company) (Millions)	Reclass & Elims	Consolidated			
Revenues			(/					
Net sales and operating revenues —								
External	\$1,409	\$1,955	\$ _	\$ _	\$3,364			
Affiliated companies	54	60		(114)				
	1,463	2,015	_	(114)	3,364			
Costs and expenses								
Cost of sales (exclusive of depreciation								
shown below)	1,155	1,658	_	(114)	2,699			
Engineering, research, and development	23	44			67			
Selling, general, and administrative	204	149	_		353			
Depreciation and amortization of other	7.2				125			
intangibles	73	64			137			
Amortization of goodwill	9	7			16			
	1,464	1,922		<u>(114</u>)	3,272			
Other income (expense)								
Gain (loss) on sale of assets	2	1			3			
Loss on sale of receivables	(5)	_			(5)			
Other income (loss)	26	(24)			2			
	23	(23)	_	_	<u>-</u>			
Income (loss) before interest expense, income taxes, minority interest, and equity in net income from affiliated companies. Interest expense —	22	70		_	92			
External (net of interest			•					
capitalized)	(1)	8	163	_	170			
Affiliated companies (net of	,							
interest income)	104	2	(106)	_	_			
Income tax expense (benefit)	45	25	(19)		51			
Minority interest		1		=	1			
	(126)	34	(38)		(130)			
Equity in net income (loss) from affiliated companies	18	(1)	(92)	75	=			
Income (loss) before extraordinary loss and cumulative effect of change in accounting principle	(108)	33	(130)	75	(130)			
Extraordinary loss, net of income tax								
Income (loss) before cumulative effect of change in accounting principle Cumulative effect of change in	(108)	33	(130)	75	(130)			
accounting principle, net of income tax			 .		<u>—</u>			
Net income (loss)	<u>\$ (108</u>)	\$ 33	<u>\$(130</u>)	<u>\$ 75</u>	<u>\$ (130</u>)			

STATEMENT OF INCOME (LOSS)

•	For the Year Ended December 31, 2000								
	Guarantor Subsidiaries	Nonguarantor Subsidiaries	Tenneco Automotive Inc. (Parent Company) (Millions)	Reclass & Elims	Consolidated				
Revenues									
Net sales and operating revenues — External	\$1,566 73 1,639	$\frac{$1,962}{71}$ $\frac{71}{2,033}$	\$ <u> </u>	\$ — (144) (144)	\$3,528 ————————————————————————————————————				
Costs and expenses									
Cost of sales (exclusive of depreciation shown below) Engineering, research, and development Selling, general, and administrative	1,296 21 262	1,614 47 166	 	(144) — —	2,766 68 428				
Depreciation and amortization of other	40	65			124				
intangibles	69 9 1,657	$\frac{65}{8}$		$\frac{-}{(144)}$	$\frac{134}{17}$				
Other images (company)	_1,057	1,900		(144)	3,413				
Other income (expense) Gain (loss) on sale of assets Loss on sale of receivables Other income (loss)	$ \begin{array}{c} $	3 (3)	<u>-</u>		$ \begin{array}{c} 3 \\ (1) \\ \hline 3 \\ 5 \end{array} $				
Income (loss) before interest expense, income taxes, minority interest, and equity in net income from affiliated companies	(13)	133			120				
Interest expense —									
External (net of interest capitalized) Affiliated companies (net of interest	(1)	11	176		186				
income)	108	9	(117)	_					
Income tax expense (benefit)	(35)	29	(21)	_	(27)				
Minority interest		2			2				
F. '4 '	(85)	82	(38)	_	(41)				
Equity in net income from affiliated companies	73		(3)	(70)					
Income (loss) before extraordinary loss and cumulative effect of change in accounting principle	(12)	82	(41)	(70)	(41)				
Extraordinary loss, net of income tax		_	(1)	-	(1)				
Income (loss) before cumulative effect of change in accounting principle Cumulative effect of change in	(12)	82	(42)	(70)	(42)				
accounting principle, net of income tax									
Net income (loss)	<u>\$ (12)</u>	\$ 82	<u>\$ (42)</u>	<u>\$ (70)</u>	<u>\$ (42)</u>				

BALANCE SHEET

	December 31, 2002				
	Guarantor Subsidiaries	Nonguarantor Subsidiaries	Tenneco Automotive Inc. (Parent Company)	Reclass & Elims	Consolidated
4 COTO			(Millions)		
ASSETS Current assets:					
Cash and cash equivalents	\$ 2	\$ 52	\$ —	s —	\$ 54
Receivables	188	282	18	(79)	•
Inventories	108	244	-	_	352
Deferred income taxes	47	9	64	(64)	
Prepayments and other	41	54	_		95
	386	641	82	(143)	966
Other assets:				<u>(115</u>)	
Investment in affiliated companies	200		1,854	(2,054)	
Notes and advances receivable from affiliates	2,644	1	3,265	(5,909)	
Long-term notes receivable, net	2,0 (1	11	. 5,265	(3,707)	13
Goodwill and intangibles, net	150	55	 ,	_	205
Deferred income taxes	135	6	78	(78)	141
Pension assets	10	7		` — ´	17
Other	47	63	25		135
	3,188	143	5,222	(8,041)	512
Plant, property, and equipment, at cost	855	1,156		,	2,011
Less — Reserves for depreciation and amortization	467	518	_	_	985
	388	638			1,026
			<u></u>	10.10.4	
	<u>\$3,962</u>	<u>\$1,422</u>	<u>\$5,304</u>	<u>\$(8,184)</u>	<u>\$2,504</u>
LIABILITIES AND SHAREHOLDERS' EQUITY					
Current liabilities:					
Short-term debt (including current maturities of					
long-term debt)					
Short-term debt — non-affiliated	\$	\$ 14	\$ 214	\$ -	\$ 228
Short-term debt — affiliated	4	1	10	(15)	
Trade payables	153	411	_	(59)	
Taxes accrued	79	25		(64)	
Other	130	92	25	(4)	
	366	543	249	(142)	
Long-term debt-non-affiliated	1.024	16	1,201	(5.000)	1,217
Long-term debt-affiliated	1,934 128	26 53	3,949	(5,909)	
Postretirement benefits and other liabilities	174	53 64	<u> </u>	(78) 6	243
Commitments and contingencies	1 / 🌳		(1)	U	∠ 4 J
Minority interest	_	19	_	_	19
Shareholders' equity	1,360	701	(94)	(2,061)	(94)
• • • • • • • • • • • • • • • • • • • •	\$3,962	\$1,422	\$5,304	\$(8,184)	
	ψ3,702	Ψ1,722	====	(0,104)	

BALANCE SHEET

		De	cember 31, 2001		
	Guarantor Subsidiaries	Nonguarantor Subsidiaries	Tenneco Automotive Inc. (Parent Company)	Reclass & Elims	Consolidated
ACCETC			(Millions)		
ASSETS					
Current assets: Cash and cash equivalents	\$ 2	\$ 51	\$ —	s —	\$ 53
Receivables	188	420	77	(290)	395
Inventories	111	215	_	_	. 326
Deferred income taxes	61	5	41	(41)	66
Prepayments and other	41	60			101
	403	751	118	(331)	941
Other assets:					
Investment in affiliated companies	312		2,034	(2,346)	_
Notes and advances receivable from affiliates	2,510	12	3,291	(5,813)	
Long-term notes receivable, net	31	9	_	_	40
Goodwill and intangibles, net		122	_	_	441
Deferred income taxes	128			_	128 28
Pension assets	8 54	20 55			136
Other				(0.150)	
	3,362	218	5,352	(8,159)	
Plant, property, and equipment, at cost	840	995		_	1,835
Less — Reserves for depreciation and amortization	. 443	425			868
·	<u>397</u>	570			<u>967</u>
	<u>\$4,162</u>	<u>\$1,539</u>	<u>\$5,470</u>	<u>\$(8,490)</u>	\$2,681
LIABILITIES AND SHAREHOLDERS' EQUITY					
Current liabilities:					
Short-term debt (including current maturities of long-term debt)					
Short-term debt — non-affiliated		\$ 17	\$ 174	\$	\$ 191
Short-term debt — affiliated		60	10	(220)	
Trade payables		336	_	(65)	
Taxes accrued		23 95	41	(41)	
Other					
T . 11. MP . 1	448	531 15	225 1,309	(328)) 876 1,324
Long-term debt-non-affiliated		3	3,940	(5,813)	
Long-term debt-affiliated Deferred income taxes		63	(78)	(5,015)	166
Postretirement benefits and other liabilities		59	(,0)	4	226
Commitments and contingencies					
Minority interest		15	_	_	15 ·
Shareholders' equity		853	74	(2,353)	74
	\$4,162	<u>\$1,539</u>	\$5,470	\$(8,490	\$2,6 <u>81</u>

STATEMENT OF CASH FLOWS

	Year Ended December 31, 2002						
	Guarantor Subsidiaries	Nonguarantor Subsidiaries	Tenneco Automotive Inc. (Parent Company) (Millions)	Reclass & Elims	Consolidated		
Operating Activities							
Net cash provided (used) by operating activities	\$300	<u>\$ 7</u>	<u>\$(119)</u>	<u>\$—</u>	\$188		
Investing Activities							
Net proceeds from the sale of businesses and assets		24		· > <u>-</u>	24		
Expenditures for plant, property, and equipment	(55)	(83)	_		(138)		
Acquisitions of businesses	-	(65)			(136)		
Investments and other	<u> 19</u>	_(12)			7		
Net cash used by investing activities	(36)	(71)		_	(107)		
Financing Activities				,			
Issuance of common and treasury shares Issuance of equity securities by a	-	. —	_		_		
subsidiary	-		_	_	_		
Issuance of long-term debt Retirement of long-term debt		3	(121)		(122)		
Net increase (decrease) in short-term debt excluding current maturities of		(2)	(121)		(123)		
long-term debt	_	(5)	52		47		
increase (decrease) in intercompany							
obligations	(264)	76	188	,	7		
Dividends (common)				· — .			
Net cash provided (used) by financing				· - =			
activities	<u>(264</u>)	<u>72</u>	<u>119</u>		<u>(73</u>)		
Effect of foreign exchange rate changes on cash and cash equivalents		(7)			<u>(7</u>)		
Increase (decrease) in cash and cash	•						
equivalents	2	1 51	<u> </u>	_	1 <u>53</u>		
Cash and cash equivalents, December 31 (Note)	<u>\$_2</u>	<u>\$ 52</u>	<u> </u>	<u>\$—</u>	<u>\$_54</u>		

Note: Cash and cash equivalents include highly liquid investments with a maturity of three months or less at the date of purchase.

STATEMENT OF CASH FLOWS

	Year Ended December 31, 2001				
	Guarantor Subsidiaries	Nonguarantor Subsidiaries	Tenneco Automotive Inc. (Parent Company) (Millions)	Reclass & Elims	Consolidated
Operating Activities					
Net cash provided (used) by operating activities	<u>\$ 46</u>	<u>\$115</u>	<u>\$(20)</u>	<u>\$—</u>	<u>\$ 141</u>
Investing Activities					
Net proceeds from the sale of businesses and					
assets	4	7		_	11
Expenditures for plant, property, and equipment	(37)	(90)			(127)
Acquisitions of businesses	<u> </u>	<u> </u>		_	(10)
	<u>(8)</u>	<u>(2)</u>		_	(10)
Net cash used by investing activities	<u>(41</u>)	<u>(85</u>)		_	<u>(126</u>)
Financing Activities					
Issuance of common and treasury shares	_		10	_	10
Issuance of equity securities by a subsidiary	_		 .	_	_
Issuance of long-term debt	_				
Retirement of long-term debt		(4)	(53)		(57)
Net increase (decrease) in short-term debt excluding current maturities of long-term debt		(7)	56	•	49
Intercompany dividends and net increase	_	(7)	30	- —	49
(decrease) in intercompany obligations	(11)	5	6		
Dividends (common)		_	_	_	_
Other		_	1	_	1
Net cash provided (used) by financing activities	$\frac{-}{(11)}$	(6)	20		3
Effect of foreign exchange rate changes on cash		/			
and cash equivalents	_	_		_	_
Increase (decrease) in cash and cash equivalents	(6)	24		_	18
Cash and cash equivalents, January 1	8	27			35
Cash and cash equivalents, December 31 (Note)	\$ 2	\$ 51	<u>\$ —</u>	<u>\$—</u>	\$ 53

Note: Cash and cash equivalents include highly liquid investments with a maturity of three months or less at the date of purchase.

STATEMENT OF CASH FLOWS

	Year Ended December 31, 2000				
	Guarantor Subsidiaries	Nonguarantor Subsidiaries	Tenneco Automotive Inc. (Parent Company) (Millions)	Reclass & Elims	Consolidated
			(MIIIIOIIS)		
Operating Activities	m 400	ф <i>45</i>	¢(202)	¢	e 224
Net cash provided (used) by operating activities	<u>\$ 482</u>	<u>\$ 45</u>	<u>\$(293)</u>	<u>\$—</u>	<u>\$ 234</u>
Investing Activities					
Net proceeds from the sale of businesses and	_	21			26
assets	5	21		_	26
Expenditures for plant, property, and equipment	(51)	(95)	_		(146)
Acquisitions of businesses	(1)	(4)			(5)
Investments and other	<u>(18</u>)	<u>(14</u>)			<u>(32</u>)
Net cash used by investing activities	<u>(65</u>)	<u>(92</u>)			(157)
Financing Activities					
Issuance of common and treasury shares			17		17
Issuance of equity securities by a subsidiary		1			1
Issuance of long-term debt		1		_	1
Retirement of long-term debt	(1)	(3)	(103)		(107)
Net increase (decrease) in short-term debt excluding current maturities of long-term debt	_	(28)	12		(16)
Intercompany dividends and net increase		` ,			
(decrease) in intercompany obligations	(425)	50	375		
Dividends (common)	_	_	(7)		(7)
Other	<u>(11</u>)	_=	$\underline{\hspace{1cm}}(1)$		(12)
Net cash provided (used) by financing activities	<u>(437</u>)	21	293		(123)
Effect of foreign exchange rate changes on cash and cash equivalents		(3)			<u>(3</u>)
Increase (decrease) in cash and cash equivalents	(20)	(29)	_		(49)
Cash and cash equivalents, January 1	28	56			84
Cash and cash equivalents, December 31 (Note)	<u>\$ 8</u>	\$ 27	<u>\$</u>	<u>\$</u>	\$ 35

Note: Cash and cash equivalents include highly liquid investments with a maturity of three months at the date of purchase.

13. Quarterly Financial Data (Unaudited)

	,					
Quarter	. 0	let Sales In and	ncome Before terest Expense, Income Taxes and Minority Interest	Income (Loss) Before Cumulative Effect of Change in Accounting Principle (Millions)	Cumulative Effect of Change in Accounting Principle	Net Income (Loss)
2002						
2002		¢ 000	e 27	e (2)	¢ (310)	# (33A)
1st		\$ 809 948	\$ 27 71	\$ (2) 19	\$(218)	\$(220) 19
2nd		856	40	5	-	5
3rd		836 846	31	9	_	3
4th						
•	· .	\$3,459	<u>\$169</u>	\$ 31	· <u>\$(218)</u>	<u>\$(187</u>)
2001					•	
1st	•	\$ 864	\$ 6	\$ (31)	\$ _	\$ (31)
2nd		925	47	2	<u> </u>	2
3rd		817	37	(2)	_	(2)
4th		758	2	(99)	~—	(99)
	-	\$3,364	\$ 92	\$(130)	•	\$(130)
	<u>.</u>	\$3,304	5 72	3(130)	<u>Ф</u>	<u>\$(130)</u>
		nings (Loss) pe Common Stock			nings (Loss) pe Common Stock	r Share
Quarter		Cumulative Effect of Change in Accounting Principle				Net Income
Quarter 2002	Income (Loss) Before Cumulative Effect of Change in Accounting	Cumulative Effect of Change in Accounting	Net Income	of C Income (Loss) Before Cumulative Effect of Change in Accounting	Common Stock Cumulative Effect of Change in Accounting	Net Income
	Income (Loss) Before Cumulative Effect of Change in Accounting	Cumulative Effect of Change in Accounting	Net Income (Loss)	of C Income (Loss) Before Cumulative Effect of Change in Accounting	Common Stock Cumulative Effect of Change in Accounting	Net Income
2002	Income (Loss) Before Cumulative Effect of Change in Accounting Principle	Cumulative Effect of Change in Accounting Principle	Net Income	of C Income (Loss) Before Cumulative Effect of Change in Accounting Principle	Cumulative Effect of Change in Accounting Principle	Net Income (Loss)
2002 1st	Income (Loss) Before Cumulative Effect of Change in Accounting Principle	Cumulative Effect of Change in Accounting Principle	Net Income (Loss)	of C Income (Loss) Before Cumulative Effect of Change in Accounting Principle \$ (.05)	Cumulative Effect of Change in Accounting Principle	Net Income (Loss) \$(5.54)
2002 1st 2nd	Income (Loss) Before Cumulative Effect of Change in Accounting Principle \$ (.05) .48	Cumulative Effect of Change in Accounting Principle	Net Income (Loss) \$(5.54) .48	of C Income (Loss) Before Cumulative Effect of Change in Accounting Principle \$ (.05) .45	Cumulative Effect of Change in Accounting Principle	Net Income (Loss) \$(5.54) .45
2002 1st	Income (Loss) Before Cumulative Effect of Change in Accounting Principle \$ (.05) .48 .13 .22	Cumulative Effect of Change in Accounting Principle \$(5.49)	Net Income (Loss) \$ (5.54) .48 .13 .22	Income (Loss) Before Cumulative Effect of Change in Accounting Principle \$ (.05) .45 .13 .21	Cumulative Effect of Change in Accounting Principle \$(5.49)	Net Income (Loss) \$(5.54) .45 .13 .21
2002 1st	Income (Loss) Before Cumulative Effect of Change in Accounting Principle \$ (.05) .48 .13	Cumulative Effect of Change in Accounting Principle	Net Income (Loss) \$(5.54) .48 .13	Income (Loss) Before Cumulative Effect of Change in Accounting Principle \$ (.05) .45 .13	Cumulative Effect of Change in Accounting Principle	Net Income (Loss) \$(5.54) .45 .13
2002 1st	Income (Loss) Before Cumulative Effect of Change in Accounting Principle \$ (.05) .48 .13 .22 \$.78	Cumulative Effect of Change in Accounting Principle \$(5.49) \$(5.49)	Net Income (Loss) \$ (5.54) .48 .13 .22 \$ (4.71)	Income (Loss) Before Cumulative Effect of Change in Accounting Principle \$ (.05) .45 .13 .21 \$.74	Cumulative Effect of Change in Accounting Principle \$(5.49) \$(5.49)	Net Income (Loss) \$ (5.54) .45 .13 .21 \$ (4.75)
2002 1st	Income (Loss) Before Cumulative Effect of Change in Accounting Principle \$ (.05) .48 .13 .22 \$.78 \$ (.84)	Cumulative Effect of Change in Accounting Principle \$(5.49)	Net Income (Loss) \$ (5.54) .48 .13 .22 \$ (4.71) \$ (.84)	Income (Loss) Before Cumulative Effect of Change in Accounting Principle \$ (.05) .45 .13 .21 \$.74 \$ (.84)	Cumulative Effect of Change in Accounting Principle \$(5.49)	Net Income (Loss) \$(5.54) .45 .13 .21 \$(4.75) \$(.84)
2002 1st	Income (Loss) Before Cumulative Effect of Change in Accounting Principle \$ (.05) .48 .13 .22 \$.78 \$ (.84) .06	Cumulative Effect of Change in Accounting Principle \$(5.49) \$(5.49)	Net Income (Loss) \$(5.54) .48 .13 .22 \$(4.71) \$ (.84) .06	Income (Loss) Before Cumulative Effect of Change in Accounting Principle \$ (.05) .45 .13 .21 \$.74 \$ (.84) .06	Cumulative Effect of Change in Accounting Principle \$(5.49) \$(5.49)	Net Income (Loss) \$ (5.54) .45 .13 .21 \$ (4.75) \$ (.84) .06
2002 1st	\$ (.05) .48 .13 .22 \$.78 \$ (.84) .06 (.06)	Cumulative Effect of Change in Accounting Principle \$(5.49) \$(5.49)	Net Income (Loss) \$(5.54) .48 .13 .22 \$(4.71) \$(.84) .06 (.06)	\$ (.05) \$ (.05) .45 .13 .21 \$.74 \$ (.84) .06 (.06)	Cumulative Effect of Change in Accounting Principle \$(5.49) \$(5.49)	Net Income (Loss) \$ (5.54) .45 .13 .21 \$ (4.75) \$ (.84) .06 (.06)
2002 1st	Income (Loss) Before Cumulative Effect of Change in Accounting Principle \$ (.05) .48 .13 .22 \$.78 \$ (.84) .06	Cumulative Effect of Change in Accounting Principle \$(5.49) \$(5.49)	Net Income (Loss) \$(5.54) .48 .13 .22 \$(4.71) \$ (.84) .06	Income (Loss) Before Cumulative Effect of Change in Accounting Principle \$ (.05) .45 .13 .21 \$.74 \$ (.84) .06	Cumulative Effect of Change in Accounting Principle \$(5.49) \$(5.49)	Net Income (Loss) \$ (5.54) .45 .13 .21 \$ (4.75) \$ (.84) .06

Note: The sum of the quarters may not equal the total of the respective year's earnings per share on either a basic or diluted basis due to changes in the weighted average shares outstanding throughout the year.

(The preceding notes are an integral part of the foregoing financial statements.)

SCHEDULE II

TENNECO AUTOMOTIVE INC. AND CONSOLIDATED SUBSIDIARIES SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

Column A	Column B	Column C Additions		Column D	Column E
Description	Balance at Beginning of Year	Charged to Costs and Expenses	Charged to Other Accounts (Millions)	Deductions	Balance at End of Year
Allowance for Doubtful Accounts and Notes					
Deducted from Assets to Which it Applies:					
Year Ended December 31, 2002	<u>\$29</u>	\$ 8	<u>\$</u>	<u>\$15</u>	<u>\$22</u>
Year Ended December 31, 2001	<u>\$24</u>	<u>\$12</u>	<u>\$—</u>	<u>\$ 7</u>	<u>\$29</u>
Year Ended December 31, 2000	<u>\$29</u>	\$ 3	<u>\$—</u>	\$ 8	\$24

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

None.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT.

The section entitled "Election of Directors" in our definitive Proxy Statement for the Annual Meeting of Stockholders to be held May 13, 2003 is incorporated herein by reference. In addition, Item 4.1 of this Annual Report on Form 10-K, which appears at the end of Part I, is incorporated herein by reference.

We have long maintained codes of conduct, business principles and ethical behavior applicable to our directors, officers and other employees. A copy of our Code of Ethical Conduct for Financial Managers, which applies to our principal executive officer, principal financial officer, controller and various other financial managers, is filed as an exhibit to this Form 10-K. We continue to review our corporate policies in light of the provisions of the Sarbanes-Oxley Act of 2002, the rules recently adopted thereunder and the pending corporate governance proposals of the New York Stock Exchange regarding codes of conduct and ethics. We plan to make any necessary or appropriate revisions to our existing codes of conduct, business principles and ethical behavior as these rules are finalized. We further plan to post a copy of the Code of Ethical Conduct for Financial Managers on our Internet website (www.tenneco-automotive.com) in the near future. After this code is posted to our website, we will make a copy of it available to any person, without charge, upon written request to Tenneco Automotive Inc., 500 North Field Drive, Lake Forest, Illinois 60045, Attn: General Counsel. Once applicable to us, we intend to satisfy the disclosure requirement under Item 10 of Form 8-K regarding amendments to or waivers of this code by posting this information on our Internet website (www.tenneco-automotive.com).

ITEM 11. EXECUTIVE COMPENSATION.

The sections entitled "Executive Compensation" and "Election of Directors — Compensation of Directors" in our definitive Proxy Statement for the Annual Meeting of Stockholders to be held May 13, 2003 are incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

The section entitled "Ownership of Common Stock" and "Approval of Amendments to the Tenneco Automotive Inc. 2002 Long-Term Incentive Plan — Outstanding Awards," in our definitive Proxy Statement for the Annual Meeting of Stockholders to be held May 13, 2003 are incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS.

The section entitled "Election of Directors — Transactions with Management and Others" in our definitive Proxy Statement for the Annual Meeting of Stockholders to be held May 13, 2003 is incorporated herein by reference.

ITEM 14. CONTROLS AND PROCEDURES.

Within the 90-day period prior to the filing of this report, an evaluation was carried out under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-14(c) under the Securities Exchange Act of 1934). Based on their evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures are effective to ensure that information required to be disclosed by our company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms. Subsequent to the date of their evaluation, there were no significant changes in our internal controls or in other factors that could significantly affect these controls, including any corrective actions with regard to significant deficiencies and material weaknesses.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K.

FINANCIAL STATEMENTS INCLUDED IN ITEM 8

See "Index to Financial Statements of Tenneco Automotive Inc. and Consolidated Subsidiaries" set forth in Item 8, "Financial Statements and Supplementary Data" for a list of financial statements filed as part of this Report.

INDEX TO SCHEDULE INCLUDED IN ITEM 8

	Page
Schedule of Tenneco Automotive Inc. and Consolidated Subsidiaries — Schedule II — Valuation	
and qualifying accounts — three years ended December 31, 2002	100

SCHEDULES OMITTED AS NOT REQUIRED OR INAPPLICABLE

Schedule I — Condensed financial information of registrant

Schedule III — Real estate and accumulated depreciation

Schedule IV — Mortgage loans on real estate

Schedule V — Supplemental information concerning property — casualty insurance operations

REPORTS ON FORM 8-K

We filed the following Current Report on Form 8-K during the quarter ended December 31, 2002:

• Current Report on Form 8-K dated October 22, 2002, including pursuant to Item 5 certain information regarding our results of operations for the third quarter of 2002.

EXHIBITS

The following exhibits are filed with this Annual Report on Form 10-K for the fiscal year ended December 31, 2002, or incorporated herein by reference (exhibits designated by an asterisk are filed with the report; all other exhibits are incorporated by reference):

INDEX TO EXHIBITS

		114DEA 10 EXHIBITS
Exhibit Number		<u>Description</u>
2	_	None.
3.1(a)	_	Restated Certificate of Incorporation of the registrant dated December 11, 1996 (incorporated herein by reference from Exhibit 3.1(a) of the registrant's Annual Report on Form 10-K for the year ended December 31, 1997, File No. 1-12387).
3.1(b)	· —	Certificate of Amendment, dated December 11, 1996 (incorporated herein by reference from Exhibit 3.1(c) of the registrant's Annual Report on Form 10-K for the year ended December 31, 1997, File No. 1-12387).
3.1(c)	_	Certificate of Ownership and Merger, dated July 8, 1997 (incorporated herein by reference from Exhibit 3.1(d) of the registrant's Annual Report on Form 10-K for the year ended December 31, 1997, File No. 1-12387).
3.1(d)	_	Certificate of Designation of Series B Junior Participating Preferred Stock dated September 9, 1998 (incorporated herein by reference from Exhibit 3.1(d) of the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1998, File No. 1-12387).
3.1(e)	_	Certificate of Elimination of the Series A Participating Junior Preferred Stock of the registrant dated September 11, 1998 (incorporated herein by reference from Exhibit 3.1(e) of the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1998, File No. 1-12387).
3.1(f)	_	Certificate of Amendment to Restated Certificate of Incorporation of the registrant dated November 5, 1999 (incorporated herein by reference from Exhibit 3.1(f) of the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1999, File No. 1-12387).
3.1(g)	_	Certificate of Amendment to Restated Certificate of Incorporation of the registrant dated November 5, 1999 (incorporated herein by reference from Exhibit 3.1(g) of the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1999, File No. 1-12387).
3.1(h)	_	Certificate of Ownership and Merger merging Tenneco Automotive Merger Sub Inc. with and into the registrant, dated November 5, 1999 (incorporated herein by reference from Exhibit 3.1(h) of the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1999, File No. 1-12387).
3.1(i)		Certificate of Amendment to Restated Certificate of Incorporation of the registrant dated May 9, 2000 (incorporated herein by reference from Exhibit 3.1(i) of the registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2000, File No. 1-12387).
3.2	_	By-laws of the registrant, as amended March 14, 2000 (incorporated herein by reference from Exhibit 3.2(a) of the registrant's Annual Report on Form 10-K for the year ended December 31, 1999, File No. 1-12387).
3.3	_	Certificate of Incorporation of Tenneco Global Holdings Inc. ("Global"), as amended

By-laws of Global (incorporated herein by reference to Exhibit 3.4 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).

Form S-4, Reg. No. 333-93757).

(incorporated herein by reference to Exhibit 3.3 to the registrant's Registration Statement on

3.5 — Certificate of Incorporation of TMC Texas Inc. ("TMC") (incorporated herein by reference to Exhibit 3.5 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).

Exhibit Number	Description
3.6	— By-laws of TMC (incorporated herein by reference to Exhibit 3.6 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
3.7	— Amended and Restate Certificate of Incorporation of Tenneco International Holding Corp. ("TIHC") (incorporated herein by reference to Exhibit 3.7 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
3.8	— Amended and Restated By-laws of TIHC (incorporated herein by reference to Exhibit 3.8 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
3.9	 Certificate of Incorporation of Clevite Industries Inc. ("Clevite"), as amended (incorporated herein by reference to Exhibit 3.9 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
3.10	— By-laws of Clevite (incorporated herein by reference to Exhibit 3.10 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
3.11	 Amended and Restated Certificate of Incorporation of the Pullman Company ("Pullman") (incorporated herein by reference to Exhibit 3.11 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
3.12	— By-laws of Pullman (incorporated herein by reference to Exhibit 3.12 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
3.13	— Certificate of Incorporation of Tenneco Automotive Operating Company Inc. ("Operating") (incorporated herein by reference to Exhibit 3.13 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
3.14	 By-laws of Operating (incorporated herein by reference to Exhibit 3.14 to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
4.1(a)	- Rights Agreement dated as of September 8, 1998, by and between the registrant and First Chicago Trust Company of New York, as Rights Agent (incorporated herein by reference from Exhibit 4.1 of the registrant's Current Report on Form 8-K dated September 24, 1998. File

- registrant's
- and First rence from Exhibit 4.1 of the registrant's Current Report on Form 8-K dated September 24, 1998, File No. 1-12387).
- 4.1(b) Amendment No. 1 to Rights Agreement, dated March 14, 2000, by and between the registrant and First Chicago Trust Company of New York, as Rights Agent (incorporated herein by reference from Exhibit 4.4(b) of the registrant's Annual Report on Form 10-K for the year ended December 31, 1999, File No. 1-12387).
- 4.1(c) Amendment No. 2 to Rights Agreement, dated February 5, 2001, by and between the registrant and First Union National Bank, as Rights Agent (incorporated herein by reference from Exhibit 4.4(b) of the registrant's Post-Effective Amendment No. 3, dated February 26, 2001, to its Registration Statement on Form 8-A dated September 17, 1998.)
- 4.2(a) Indenture, dated as of November 1, 1996, between the registrant and The Chase Manhattan Bank, as Trustee (incorporated herein by reference from Exhibit 4.1 of the registrant's Registration Statement on Form S-4, Registration No. 333-14003).
- 4.2(b) First Supplemental Indenture dated as of December 11, 1996 to Indenture dated as of November 1, 1996 between registrant and The Chase Manhattan Bank, as Trustee (incorporated herein by reference from Exhibit 4.3(b) of the registrant's Annual Report on Form 10-K for the year ended December 31, 1996, File No. 1-12387).
- 4.2(c) Second Supplemental Indenture dated as of December 11, 1996 to Indenture dated as of November 1, 1996 between the registrant and The Chase Manhattan Bank, as Trustee (incorporated herein by reference from Exhibit 4.3(c) of the registrant's Annual Report on Form 10-K for the year ended December 31, 1996, File No. 1-12387).

Exhibit
Number

Description

- 4.2(d) Third Supplemental Indenture dated as of December 11, 1996 to Indenture dated as of November 1, 1996 between the registrant and The Chase Manhattan Bank, as Trustee (incorporated herein by reference from Exhibit 4.3(d) of the registrant's Annual Report on Form 10-K for the year ended December 31, 1996, File No. 1-12387).
- 4.2(e) Fourth Supplemental Indenture dated as of December 11, 1996 to Indenture dated as of November 1, 1996 between the registrant and The Chase Manhattan Bank, as Trustee (incorporated herein by reference from Exhibit 4.3(e) of the registrant's Annual Report on Form 10-K for the year ended December 31, 1996, File No. 1-12387).
- 4.2(f) Eighth Supplemental Indenture, dated as of April 28, 1997, to Indenture, dated as of November 1, 1996 between the registrant and The Chase Manhattan Bank, as Trustee (incorporated herein by reference from Exhibit 4.1 of the registrant's Current Report on Form 8-K dated April 23, 1997, File No. 1-12387).
- 4.2(g) Ninth Supplemental Indenture, dated as of April 28, 1997, to Indenture, dated as of November 1, 1996, between the registrant and The Chase Manhattan Bank, as Trustee (incorporated herein by reference from Exhibit 4.2 of the registrant's Current Report on Form 8-K dated April 23, 1997, File No. 1-12387).
- 4.2(h) Tenth Supplemental Indenture, dated as of July 16, 1997, to Indenture, dated as of November 1, 1996, between the registrant and The Chase Manhattan Bank, as Trustee (incorporated herein by reference from Exhibit 4.1 of the registrant's Current Report on Form 8-K dated June 11, 1997, File No. 1-12387).
- 4.2(i) Eleventh Supplemental Indenture, dated October 21, 1999, to Indenture dated November 1, 1996 between The Chase Manhattan Bank, as Trustee, and the registrant (incorporated herein by reference from Exhibit 4.2(1) of the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1999, File No. 1-12387).
- Specimen stock certificate for Tenneco Automotive Inc. common stock (incorporated herein by reference from Exhibit 4.3 of the registrant's Annual Report on Form 10-K for the year ended December 31, 2000, File No. 1-12387)
- 4.4(a) Indenture dated October 14, 1999 by and between the registrant and The Bank of New York, as trustee (incorporated herein by reference from Exhibit 4.4(a) of the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1999, File No. 1-12387).
- 4.4(b) Supplemental Indenture dated November 4, 1999 among Tenneco Automotive Operating Subsidiary Inc. (formerly Tenneco Automotive Inc.), Tenneco International Holding Corp., Tenneco Global Holdings Inc., the Pullman Company, Clevite Industries Inc. and TMC Texas Inc. in favor of The Bank of New York, as trustee (incorporated herein by reference from Exhibit 4.4(b) of the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1999, File No. 1-12387).
- 4.4(c) Subsidiary Guarantee dated as of October 14, 1999 from Tenneco Automotive Operating Subsidiary Inc. (formerly Tenneco Automotive Inc.), Tenneco International Holding Corp., Tenneco Global Holdings Inc., the Pullman Company, Clevite Industries Inc. and TMC Texas Inc. in favor of The Bank of New York, as trustee (incorporated herein by reference to Exhibit 4.4(c) to the registrant's Registration Statement on Form S-4, Reg. No. 333-93757).
- 4.5(a) Credit Agreement, dated as of September 30, 1999, among the registrant, the Lenders named therein, Commerzbank and Bank of America, N.A., Citicorp USA, Inc. and The Chase Manhattan Bank (incorporated herein by reference from Exhibit 4.5(a) of the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1999, File No. 1-12387).

Exhibit Number

Description

- 4.5(b) First Amendment to the Credit Agreement, dated October 20, 2000, among the registrant, The Chase Manhattan Bank and Citicorp USA, Inc. (incorporated herein by reference from Exhibit 4.1 to the registrant's Current Report on Form 8-K dated October 24, 2000, File No. 1-12387).
- 4.5(c) Second Amendment to Credit Agreement, dated March 22, 2001, among the registrant, the lenders party thereto and The Chase Manhattan Bank (incorporated by reference from Exhibit 4.1 to the registrant's Current Report on Form 8-K dated March 22, 2001, File No. 1-12387).
- 4.5(d) Third Amendment to Credit Agreement, dated March 13, 2002, among the registrant, JPMorgan Chase Bank as administrative agent and the lenders named therein. (incorporated by reference from Exhibit 4.1 of the registrant's Current Report on Form 8-K dated March 13, 2002, File No. 1-2387).
- 9 None.
- 10.1 Distribution Agreement, dated November 1, 1996, by and among El Paso Tennessee Pipeline Co. (formerly Tenneco Inc.), the registrant, and Newport News Shipbuilding Inc. (incorporated herein by reference from Exhibit 2 of the registrant's Form 10, File No. 1-12387).
- Amendment No. 1 to Distribution Agreement, dated as of December 11, 1996, by and among El Paso Tennessee Pipeline Co. (formerly Tenneco Inc.), the registrant, and Newport News Shipbuilding Inc. (incorporated herein by reference from Exhibit 10.2 of the registrant's Annual Report on Form 10-K for the year ended December 31, 1996, File No. 1-12387).
- 10.3 Debt and Cash Allocation Agreement, dated December 11, 1996, by and among El Paso Tennessee Pipeline Co. (formerly Tenneco Inc.), the registrant, and Newport News Shipbuilding Inc. (incorporated herein by reference from Exhibit 10.3 of the registrant's Annual Report on Form 10-K for the year ended December 31, 1996, File No. 1-12387).
- Benefits Agreement, dated December 11, 1996, by and among El Paso Tennessee Pipeline Co. (formerly Tenneco Inc.), the registrant, and Newport News Shipbuilding Inc. (incorporated herein by reference from Exhibit 10.4 of the registrant's Annual Report on Form 10-K for the year ended December 31, 1996, File No. 1-12387).
- 10.5 Insurance Agreement, dated December 11, 1996, by and among El Paso Tennessee Pipeline Co. (formerly Tenneco Inc.), the registrant, and Newport News Shipbuilding Inc. (incorporated herein by reference from Exhibit 10.5 of the registrant's Annual Report on Form 10-K for the year ended December 31, 1996, File No. 1-12387).
- Tax Sharing Agreement, dated December 11, 1996, by and among El Paso Tennessee Pipeline Co. (formerly Tenneco Inc.), Newport News Shipbuilding Inc., the registrant, and El Paso Natural Gas Company (incorporated herein by reference from Exhibit 10.6 of the registrant's Annual Report on Form 10-K for the year ended December 31, 1996, File No. 1-12387).
- 10.7 First Amendment to Tax Sharing Agreement, dated as of December 11, 1996, among El Paso Tennessee Pipeline Co. (formerly Tenneco Inc.), the registrant, El Paso Natural Gas Company and Newport News Shipbuilding Inc. (incorporated herein by reference from Exhibit 10.7 of the registrant's Annual Report on Form 10-K for the year ended December 31, 1996, File No. 1-12387).
- *10.8 Tenneco Automotive Inc. EVA Incentive Compensation Plan. (1)
- 10.9 Tenneco Automotive Inc. Change of Control Severance Benefits Plan for Key Executives (incorporated herein by reference from Exhibit 10.13 of the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1999, File No. 1-12387). (1)

Exhibit Number	Description	
10.10	 Tenneco Automotive Inc. Stock Ownership Plan (incorporated herein by reference fr Exhibit 10.10 of the registrant's Registration Statement on Form S-4, Reg. No. 333-93757) 	
10.11	 Tenneco Automotive Inc. Key Executive Pension Plan (incorporated herein by reference free Exhibit 10.11 to the registrant's Quarterly Report on Form 10-Q for the quarter ended June 2000, File No. 1-12387).⁽¹⁾ 	
10.12	 Tenneco Automotive Inc. Deferred Compensation Plan (incorporated herein by reference fr Exhibit 10.12 to the registrant's Quarterly Report on Form 10-Q for the quarter ended June 2000, File No. 1-12387).⁽¹⁾ 	
10.13	 Tenneco Automotive Inc. Supplemental Executive Retirement Plan (incorporated herein reference from Exhibit 10.13 to the registrant's Quarterly Report on Form 10-Q for the quar ended June 30, 2000, File No. 1-12387).⁽¹⁾ 	-
10.14	 Human Resources Agreement by and between Tenneco Automotive Inc. and Tenne Packaging Inc. dated November 4, 1999 (incorporated herein by reference to Exhibit 99.1 the registrant's Current Report on Form 8-K dated November 4, 1999, File No. 1-12387). 	to
10.15	 Tax Sharing Agreement by and between Tenneco Automotive Inc. and Tenneco Packaging I dated November 3, 1999 (incorporated herein by reference to Exhibit 99.2 to the registrar Current Report on Form 8-K dated November 4, 1999, File No. 1-12387). 	
10.16	- Amended and Restated Transition Services Agreement by and between Tenneco Automot Inc. and Tenneco Packaging Inc. dated as of November 4, 1999 (incorporated herein reference from Exhibit 10.21 of the registrant's Quarterly Report on Form 10-Q for the quarended September 30, 1999, File No. 1-12387).	by
10.17	Assumption Agreement among Tenneco Automotive Operating Company Inc., Tenne International Holding Corp., Tenneco Global Holdings Inc., The Pullman Company, Clev Industries Inc., TMC Texas Inc., Salomon Smith Barney Inc. and the other Initial Purchas listed in the Purchase Agreement dated as of November 4, 1999 (incorporated herein reference from Exhibit 10.24 of the registrant's Registration Statement on Form S-4, R No. 333-93757).	vite ers by
10.18	 Amendment No. 1 to Change in Control Severance Benefits Plan for Key Executi (incorporated herein by reference from Exhibit 10.23 to the registrant's Quarterly Report Form 10-Q for the quarter ended June 30, 2000, File No. 1-12387). 	
10.19	 Letter Agreement dated July 27, 2000 between the registrant and Mark P. Frisse (incorporated herein by reference from Exhibit 10.24 to the registrant's Quarterly Report Form 10-Q for the quarter ended June 30, 2000, File No. 1-12387). 	
10.20	 Letter Agreement dated July 27, 2000 between the registrant and Mark A. McColle (incorporated herein by reference from Exhibit 10.25 to the registrant's Quarterly Report Form 10-Q for the quarter ended June 30, 2000, File No. 1-12387). 	
10.21	 Letter Agreement dated July 27, 2000 between the registrant and Richard P. Schneid (incorporated herein by reference from Exhibit 10.26 to the registrant's Quarterly Report Form 10-Q for the quarter ended June 30, 2000, File No. 1-12387). 	
10.22	 Letter Agreement dated July 27, 2000 between the registrant and Timothy R. Donov (incorporated herein by reference from Exhibit 10.28 to the registrant's Annual Report Form 10-K for the year ended December 31, 2000, File No. 1-12387). 	
10.23	- Form of Indemnity Agreement entered into between the registrant and the following direct of the registrant: Paul Stecko, M. Kathryn Eickhoff and Dennis Severance (incorporated hereby reference from Exhibit 10.29 to the registrant's Quarterly Report on Form 10-Q for the registrant and the following direct of the registrant and	ein

by reference from Exhibit 10.29 to the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2000, File No. 1-12387).⁽¹⁾

Exhibit Number	Description
10.24	— Mark P. Frissora Special Appendix under Tenneco Automotive Inc. Supplemental Executive Retirement Plan (incorporated herein by reference from Exhibit 10.30 to the registrant's Annual Report on Form 10-K for the year ended December 31, 2000, File No. 1-12387). (1)
10.25	 Letter Agreement dated as of June 1, 2001 between the registrant and Hari Nair (incorporated herein by reference from Exhibit 10.28 to the registrant's Annual Report on Form 10-K for the year ended December 31, 2001. File No. 1-12387).⁽¹⁾
10.26	— Tenneco Automotive Inc. 2002 Long-Term Incentive Plan (incorporated herein by reference from Exhibit 10.27 to the registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2002. File No. 1-12387). (1)
*10.27	— Amendment to No. 1 Tenneco Automotive Inc. Deferred Compensation Plan. (1)
*10.28	— Tenneco Automotive Inc. Supplemental Stock Ownership Plan. (1)
11	— None.
*12	 Statement of Ratio of Earnings to Fixed Charges—December 31, 2002, 2001, 2000, 1999, and 1998.
13	— None.
16	— None.
18	— None.
*21	— List of subsidiaries of the registrant.
22	— None.
*23.1	- Consent of Deloitte & Touche LLP.
*23.2	- Statement Concerning Absence of Consent of Arthur Andersen LLP.
*24	 Power of Attorney of Mark P. Frissora, Mark A. McCollum, Kenneth R. Trammell, Sir David Plastow, M. Kathryn Eickhoff, Roger B. Porter, Paul T. Stecko, David B. Price, Jr., Frank E. Macher and Dennis G. Severance.
*99.1	- Certification of Mark P. Frissora under Section 906 of the Sarbanes-Oxley Act of 2002.
*99.2	- Certification of Mark A. McCollum under Section 906 of the Sarbanes-Oxley Act of 2002.
*99.3 	— Tenneco Automotive Inc. Code of Ethical Conduct for Financial Managers.

^[1] Indicates a management contract or compensatory plan or arrangement.

^{*} Filed herewith.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Attorney in fact

	•			
	TENNECO AUTOMOTIVE INC.			
	By /s/ Mark P. Frissora*			
	Mark P. Frissora			
	Chairman and Chief Executive Officer			
Date: March 18, 2003				
Pursuant to the requirements of the Securities the following persons in the capacities indicated on	Exchange Act of 1934 this report has been signed by March 18, 2003.			
Signature	<u>Title</u>			
/s/ MARK P. FRISSORA* Mark P. Frissora	Chairman, President and Chief Executive Officer and Director (principal executive officer)			
/s/ MARK A. McCollum* Mark A. McCollum	Senior Vice President and Chief Financial Officer (principal financial officer)			

CERTIFICATIONS

- I, Mark P. Frissora, Chairman and Chief Executive Officer of Tenneco Automotive Inc., certify that:
 - 1. I have reviewed this annual report on Form 10-K of Tenneco Automotive Inc.;
 - 2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
 - 3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
 - 4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:
 - a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
 - b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
 - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
 - 5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
 - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
 - 6. The registrant's other certifying officers and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

/s/	Mark P. Frissora	

Dated: March 18, 2003

- I, Mark A. McCollum, Senior Vice President and Chief Financial Officer of Tenneco Automotive Inc., certify that:
 - 1. I have reviewed this annual report on Form 10-K of Tenneco Automotive Inc.;
 - 2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
 - 3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
 - 4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:
 - a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
 - b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
 - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
 - 5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
 - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
 - 6. The registrant's other certifying officers and I have indicated in this quarterly report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

/s/	Mark A. McCollum

Dated: March 18, 2003

TENNECO AUTOMOTIVE INC. AND CONSOLIDATED SUBSIDIARIES COMBINED WITH 50% OWNED UNCONSOLIDATED SUBSIDIARIES COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES

	Years Ended December 31,				
	2002	2001	2000	1999	1998
	(Dollars in Millions)				
Net income (loss) before extraordinary loss and cumulative effect of change in accounting principle	\$ 31	\$(130)	\$(41)	\$ (63)	\$ 116
Add:					
Interest expense	141	170	186	106	69
Portion of rentals representative of the interest factor	11	10	13	11	10
Preferred stock dividend requirements of majority-owned subsidiaries	_		_	22	27
Income tax expense (benefit) and other taxes on income	(7)	51	(27)	82	13
Minority interest	4	_		_	_
Amortization of interest capitalized	1	1	_		_
Undistributed losses of affiliated companies in which less than a 50% voting interest is owned	2	1	_=		
Earnings as defined	<u>\$ 183</u>	<u>\$ 103</u>	<u>\$131</u>	<u>\$ 158</u>	\$ 235
Interest expense	\$ 141	\$ 170	\$186	\$ 106	\$ 69
Interest capitalized	4	3	6	_	
Portion of rentals representative of the interest factor	11	10	13	11	10
Preferred stock dividend requirements of majority-owned subsidiaries on a pre-tax basis	_	_	_	35	30
Fixed charges as defined	<u>\$ 156</u>	\$ 183	\$205	\$ 152	\$ 109
Ratio of earnings to fixed charges	1.17	56	<u>.64</u>	1.04	2.16

INVESTOR INFORMATION

Corporate Headquarters Tenneco Automotive Inc. 500 North Field Drive Lake Forest, Illinois 60045 347,432,5000

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www.tenneco-automotive.com

Corporate Information
Individuals interested in receiving the
company's latest quarterly earnings press
release or other company literature
should write the Investor Relations
department at the corporate headquarters address or call 347.432.5042.

Information about Tenneco Automotive is also available on the company's web site.

Stock Listing

Tenneco Automotive's common stock is listed under the ticker symbol TEN.

TEN is traded primarily on the New York Stock Exchange and also on the following exchanges: Chicago, Pacific and London.

As of February 13, 2003, there were approximately 58,376 holders of record of the company's common stock, par value \$0.01 per share.

Investor Inquiries

Securities analysts, portfolio managers and representatives of financial institutions seeking information about the company should contact the investor Relations department: 347,432,5042.

Stockholder Inquiries

For stockholder services such as exchange of certificates, issuance of certificates, change of address, change in registered ownership or share balance, write, call or e-mail the company's transfer agent:

Wachovia Bank, N.A.
Equity Services Group
1525 West W.T. Harris Blvd., 3C3
Charlotte, NC 23238-1153
366.839.3259 Toll Free
704.427.2602

www.wachovia.com/shareholderservices Click on "Access Accounts" Click on "FirstLink Equity"

Prividends

The Board of Directors of Tenneco Automotive eliminated its quarterly common stock dividend on January 9. 2001. Prior to that, the company had paid a \$0.05 per share of common stock dividend in each of the four quarters of 2000. The company expects that for the foreseeable future it will follow a policy of retaining earnings in order to finance the continued development of its business. Additional information on the company's dividend policy and restrictions on the payment of dividends can be found in Management's Discussion and Analysis in the Annual Report on Form 10-K for the year ended December 31, 2002.

Annual Meeting

The Annual Meeting of Stockholders will be held at 10:00 a.m. Central Time on Tuesday. May 13, 2003, at Tenneco Automotive's headquarters, 500 North Field Drive, Lake Forest, Illinois.

STOCK PRICE DATA

	2	002	20	01		
		Sale Prices				
	High	Low	High	Low		
First Quarter	\$4.10	\$1.90	\$4.25	\$2.62		
Second Quarter	\$6.75	\$3.32	\$4.49	\$2.40		
Third Quarter	\$8.32	\$3.50	\$5.45	\$1,36		
Fourth Quarter	\$5. 9 7	\$3.28	\$2.30	\$1.35		

500 NORTH FIELD DRIVE LAKE FOREST, ILLINOIS 60045

tenneco-automotive.com NYSE:TEN

